

SEQUENCE LISTING

<110> C. Frank Bennett
Andrew T. Watt

<120> ANTISENSE MODULATION OF INTERFERON GAMMA RECEPTOR 2 EXPRESSION

<130> RTS-0235

<160> 89

<210> 1

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 1

tccgtcatcg ctctcaggg

20

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 2

atgcattctg cccccaagga

20

<210> 3

<211> 2214

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (649) ... (1662)

<400> 3

gttgactgga ggcggaggtt gcagtgagcc gagatcgccc cactgcactc cagcctggtg 60

actccgtctc aaaaaaaagg ggaggggggc gggggagagt tgaaagctta atatgtactt 120

tgggggctat taaagcaaac atttcgacta aagggggcaa tcctcgaatt gtgcgatcaa 180

gcacccgaga ggagagttgg ggggggtcag gaggggtggg ggctccaggg aacgcccggg 240

ggcctgggcc ggggtctcgc gggggccttc cggaaggatc gcggcccccg aaggtgggcg 300

tccgcggggg ctccagtctc caggacgttc cgggaggtcc cgcgtctctg gaggcgggct 360

gcgtggggtc cccgcgctgc agccgcagag gccccccagg gcgcgggttc ccggagcggg 420

aaagtccgc gcgggggagg tggcctcggg ggccgggacg ggccggggcg ggggcgcggg 480

cggccgagcc gaatcccttc caccgggacg ccccgctgcc gtcgggaag aggcggggcc 540

tgccgcacct gcgctcgcca tggcggtttg ggccggcgacg tgagcggctc cgcggacccc 600

gagcggggcc ccggcccgca cctgagccgc cgccgagcgc ccggggcc atg cga ccg 657

Met Arg Pro

1

acg ctg ctg tgg tgc ctg ctg ctg ctg ctc gga gtc ttc gcc gcc gcc 705

Thr Leu Leu Trp Ser Leu Leu Leu Leu Leu Gly Val Phe Ala Ala Ala

5

10

15

gcc gcg gcc ccg cca gac cct ctt tcc cag ctg ccc gct cct cag cac 753

Ala Ala Ala Pro Pro Asp Pro Leu Ser Gln Leu Pro Ala Pro Gln His

20

25

30

35

ccg aag att cgc ctg tac aac gca gag cag gtc ctg agt tgg gag cca 801

Pro Lys Ile Arg Leu Tyr Asn Ala Glu Gln Val Leu Ser Trp Glu Pro

40

45

50

gtg gcc ctg agc aat agc acg agg cct gtt gtc tac cga gtg cag ttt	849
Val Ala Leu Ser Asn Ser Thr Arg Pro Val Val Tyr Arg Val Gln Phe	
55 60 65	
aaa tac acc gac agt aaa tgg ttc acg gcc gac atc atg tcc ata ggg	897
Lys Tyr Thr Asp Ser Lys Trp Phe Thr Ala Asp Ile Met Ser Ile Gly	
70 75 80	
gtg aat tgt aca cag atc aca gca aca gag tgt gac ttc act gcc gcc	945
Val Asn Cys Thr Gln Ile Thr Ala Thr Glu Cys Asp Phe Thr Ala Ala	
85 90 95	
agt ccc tca gca ggc ttc cca atg gat ttc aat gtc act cta cgc ctt	993
Ser Pro Ser Ala Gly Phe Pro Met Asp Phe Asn Val Thr Leu Arg Leu	
100 105 110 115	
cga gct gag ctg gga gca ctc cat tct gcc tgg gtg aca atg cct tgg	1041
Arg Ala Glu Leu Gly Ala Leu His Ser Ala Trp Val Thr Met Pro Trp	
120 125 130	
ttt caa cac tat cgg aat gtg act gtc ggg cct cca gaa aac att gag	1089
Phe Gln His Tyr Arg Asn Val Thr Val Gly Pro Pro Glu Asn Ile Glu	
135 140 145	
gtg acc cca gga gaa ggc tcc ctc atc atc agg ttc tcc tct ccc ttt	1137
Val Thr Pro Gly Glu Gly Ser Leu Ile Ile Arg Phe Ser Ser Pro Phe	
150 155 160	
gac atc gct gat acc tcc acg gcc ttt ttt tgt tat tat gtc cat tac	1185
Asp Ile Ala Asp Thr Ser Thr Ala Phe Phe Cys Tyr Tyr Val His Tyr	
165 170 175	
tgg gaa aaa gga gga atc caa cag gtc aaa ggc cct ttc aga agc aac	1233
Trp Glu Lys Gly Gly Ile Gln Gln Val Lys Gly Pro Phe Arg Ser Asn	
180 185 190 195	
tcc att tca ttg gat aac tta aaa ccc tcc aga gtg tac tgt tta caa	1281
Ser Ile Ser Leu Asp Asn Leu Lys Pro Ser Arg Val Tyr Cys Leu Gln	
200 205 210	
gtc cag gca caa ctg ctt tgg aac aaa agt aac atc ttt aga gtc ggg	1329
Val Gln Ala Gln Leu Leu Trp Asn Lys Ser Asn Ile Phe Arg Val Gly	
215 220 225	

cat tta agc aac ata tct tgc tac gaa aca atg gca gat gcc tcc act 1377
His Leu Ser Asn Ile Ser Cys Tyr Glu Thr Met Ala Asp Ala Ser Thr
230 235 240

gag ctt cag caa gtc atc ctg atc tcc gtg gga aca ttt tcg ttg ctg 1425
Glu Leu Gln Gln Val Ile Leu Ile Ser Val Gly Thr Phe Ser Leu Leu
245 250 255

tcg gtg ctg gca gga gcc tgt ttc ttc ctg gtc ctg aaa tat aga ggc 1473
Ser Val Leu Ala Gly Ala Cys Phe Phe Leu Val Leu Lys Tyr Arg Gly
260 265 270 275

ctg att aaa tac tgg ttt cac act cca cca agc atc cca tta cag ata 1521
Leu Ile Lys Tyr Trp Phe His Thr Pro Pro Ser Ile Pro Leu Gln Ile
280 285 290

gaa gag tat tta aaa gac cca act cag ccc atc tta gag gcc ttg gac 1569
Glu Glu Tyr Leu Lys Asp Pro Thr Gln Pro Ile Leu Glu Ala Leu Asp
295 300 305

aag gac agc tca cca aag gat gac gtc tgg gac tct gtg tcc att atc 1617
Lys Asp Ser Ser Pro Lys Asp Asp Val Trp Asp Ser Val Ser Ile Ile
310 315 320

tcg ttt ccg gaa aag gag caa gaa gat gtt ctc caa acg ctt tga 1662
Ser Phe Pro Glu Lys Glu Gln Glu Asp Val Leu Gln Thr Leu
325 330 335

accaaagcat gggcctagcc cactggctcc ctggaagaga tcaagccatc ggagctgcta 1722

gagttctgtc tggactttcc agagaccagt attccctttt gctgcctcta aaaggcctgt 1782

ccctgcagac atgagagaca gcaggtctca tgggggtgac aagctttttt ttttttttct 1842

taaagaattt tcaaatcaa attccagaat gattttacgg agatatccca ggaatttaa 1902

ggcttctctt aaacactaaa aaggcatgta attgcttggt agcaaaatgg atatgacaca 1962

tctctgatac ttttttcatt attggttggg ctgagcagtc agaagacctg gtcgtcgtct 2022

tgactttggc aaatgagccg gagccccttg ggcaggtcac acaacctgtc ccagcgaggg 2082

acactgagtg gcccttcatt tacatccatg gtgtgctggc ttaaaatgta attaatcttg 2142

taaataatact ctagtaatt taagattttg tttttaaaact ggaaataaaa gattgtatag 2202
tgcattgtttt tt 2214

<210> 4

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 4

cagcaggctt cccaatgg

18

<210> 5

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 5

ggaggcccgag cagtcacat

19

<210> 6

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Probe

<400> 6

tcaatgtcac tctacgcctt cgagctga

28

<210> 7
<211> 19
<212> DNA
<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 7
gaaggtgaag gtcggagtc

19

<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 8
gaagatggtg atgggatttc

20

<210> 9
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> PCR Probe

<400> 9
caagcttccc gttctcagcc

20

<210> 10
<211> 339
<212> DNA
<213> Homo sapiens

<220>

<400> 10

ttttagtoga aatgtttgct ttaatagccc ccaaagtaca tattaagctt tcaactctcc 60

ccgccecccc tccccctttt ttgagacgg agtcaccagg ctggagtgca gtggggcgat 120

ctcggtctac tgcaactcc gcctccagtc aacccattt tgaaaagggt ttaagggga 180

aggagttaga aagggccccag tgaaggagga ggtggggctc tgggggtggg gggaatggcc 240

tccgagcagg gggagggaga gacagaaact tccagcattt ctaaatggcg tggggtttgc 300

cctggagccg gcggcggtgc acgagtagga agtccttta 339

<210> 11

<211> 54000

<212> DNA

<213> Homo sapiens

<220>

<221> exon

<222> (514)...(1420)

<223> Exon 1

<221> intron

<222> (1421)...(12692)

<223> Intron 1

<221> exon

<222> (12693)...(12825)

<223> Exon 2

<221> intron

<222> (12826)...(19284)

<223> Intron 2

<221> exon

<222> (19285)...(19490)

<223> Exon 3

<221> intron

<222> (19491)...(24688)

<223> Intron 3

<221> exon
<222> (24689) ... (24837)
<223> Exon 4

<221> intron
<222> (24838) ... (29981)
<223> Intron 4

<221> exon
<222> (29982) ... (30141)
<223> Exon 5

<221> intron
<222> (30142) ... (30518)
<223> Intron 5

<221> exon
<222> (30519) ... (30676)
<223> Exon 6

<221> intron
<222> (30677) ... (34632)
<223> Intron 6

<221> exon
<222> (34633) ... (35318)
<223> Exon 7

<400> 11
ggctgggtctc caactcctgg cctcatgtga tccgccacc tcggcctcct aaagtgtctga 60
gattacaggc gtgagccacc gcgcctggca tcagtgcata ctttttgaag tgattccaag 120
ttatcgcccg cttttttcgt gtaacatata aatacatctc tgtatctaga aatatccaat 180
gcataattca attgtctcgc aggtatttca tcacgtatct tcacgagcgt ggccaatttc 240
aaaatagttc tacaagagg aaatgcaaga atgtgggaag agcaaaagaa aagctctatg 300
ttgcaaaacc catttttgct aacgtgtcca gtgggctccc gggacgacct gtttttaaat 360
tcttggtctc cctgcaccgc gtccctcctt tgctgcgcta gctttatgac gcatcttggga 420
agaacagggc agatttaaaa ccctctccca acaggcgtca aacgacatgg tgcaaggctcg 480
ggctggggag cgggcctgcg gctgcccagc tgctaaagga cttcctactc gtgcaccgac 540
gccggctcca gggcaaaccc cagccattt agaatgtct gaagtctctg tctctccctc 600
ccctgctcg gaggccattc cccccacccc cagagcccca cctcctcctt cactgggccc 660
tttctaactc ctccctcta aaaccctttt caaaatgggg ttgactggag gcggaggttg 720
cagtgcgcgc agatgcctcc actgcactcc agcctgttga ctccgtctca aaaaaagggg 780
gagggggggc ggggagagtt gaaagcttaa tatgtacttt gggggctatt aaagcaaaaca 840

ttctgactaa agggggaat cctcgaattg tgcgatcaag caccgcagag gagagttggg 900
 gggggtcagg aggggtgggg gctccaggga aagcccgggg gtctgggccc ggggtctcgcg 960
 gggcccttcc ggaaggatcg cggcccccga aggtgggctg ccgcgggggc tccagtctcc 1020
 aggaagttcc gggaggctcc gcgctctggg aggcgggctg cgtgggggtcc ccgcgctgca 1080
 gccgcagagg ccccccaggg ccgcgggttc cgagcgggga aagtcgccgc cggggggcgt 1140
 ggcttcgggg gcgggacggg ccggggggcg gggcgcgggc ggccgagccg aatcccttcc 1200
 accgggacgc ccgctgctg ctccgggaaga gcggggccct gcgcgctcgc ggtccgcat 1260
 ggccggttgg gcggcgagct gagcggtccc gcggacccc agcggggccc cggccgcgac 1320
 ctgagccgcc gccgagcgcc cggggcccat gcaccgacgc tgcgtgtgtc gctgctgctg 1380
 ctgctcggga tcttcggcgc gcgcgcgcgc gcccccgccg gtgagccggg cctgggctcc 1440
 cgccggcgga cggcgcgca gccgcagcat gtgggggctg ggggactccc ggtcgtggg 1500
 gtggggggaa tctccgggt gctcagagtg ggtgggaatc tgcgggtgct tcttggtggg 1560
 tgggataatg ggagtgctca gatcaggtgg gaacctgcgc gtgccccagg tgggggtctt 1620
 gcgggggtgc cagggttaga gggggccgct gggagccccc agcgggggctg ggtggggcgc 1680
 ccaggagtcc cagacaggag ctgggcagca gcaggaagac ggggggcacc cctccgtggc 1740
 tcttgccgcg cgggacaccc ctctccggga gaggacactc ggtgccctcc cgtgaagccg 1800
 gtaacctcgc ctgcgcacc tccccaccc gcgcgcgcgc gccgggaaag ccagcgtggc 1860
 cccagctctc gaatttctcg gaatgaacaa cagcaaatg aatccagggc tccggcgggg 1920
 gccgccttgc ctggccactg gttctgcagc ctggcgagac tgcgcttagt ccccgctcgg 1980
 agtgctctcc gaaggcctg ctggaagcta gactcagtc ctttgttagt gcagcgtgctg 2040
 agcagggacc agcgtcttgg acgggtgacc cagactcaat tccgactttg gccaggggca 2100
 tgtttgacac tgggtgtgaa atctagacag ttcccgcggt catagagatg gggcagcagc 2160
 attcaggcag ggcctcagaac tgtccgggtc ccatcagtggt tggggcgga gagggaagat 2220
 gtcaactgag ccaggcattt attattttta ttgtgttgg agacaggggtg tgcctctgct 2280
 gcccaggctg gagtgcagtg ggcagcatct cagctactgc agcctccgc tcccgctgct 2340
 aagcgatctt cccacgtcag cctcccaaga aggtgggtatt attggccacg cctggccaat 2400
 ttttgtattt tttgtagaga ggaggtctca ctgtgttgcc caggtgtgct ttgtactcct 2460
 gagctccacg aatccaccgc ccttgccctc tgaaagcgct gggattacag gcttgaggca 2520
 ccgtgcccag ctgagccagg cttttaaaaa cggttctgtc cctaccaga gagctctcta 2580
 cctggcgccg tcccttaacct ctgacaccag ctgaccacgc ttatgagca aacataaaaa 2640
 ccaaaagaaa cccaggtctg gtggctcacg cctgtaatcc cagcactttg ggaggctgag 2700
 gcagcatcat gaggtcagga gttcgagacc agcttgacca acatggtgaa accccgcgtc 2760
 gtgctaaaaa tacatatcact ggcgtggtag cgcgcgcctg taatcccaac tactcaggag 2820
 gccagggcgg gagaatcact tgaaccgcag agctgagatc tcaccactgc actccgcctc 2880
 gggcgacaga gcaagactct gtctcagaaa aaaaaaaaaa aaaaaaagaa aaagaggaaa 2940
 agaccttaat gacaaatgtg tggctagaac attcttgtgt atgtatctgc ttttgttttg 3000
 ctgggttctt tccctggggg agagtgtatc cataggagt ctagaattt aaagattctc 3060
 tcccatctga agctataacc ttgtgttgtg ggttgtttt ttctaccgac attccttgca 3120
 aaggcccata agttccgtat ctccctgata tgggggtgct tgacttgag gaaattatta 3180
 actgcttttc catgggagct agacagatgt gttcaaatcc tgactctgt tccacttgcc 3240
 ttccagctgt gacaaatctg catatgcctc ctccctaggc ctctcctaa tgagagtgtg 3300
 tgattgtcct agtgtgggat cagcaggcga gtgacttcat gccagagagg agtgactagt 3360
 ggtgatctgt gaactgttg tgacttacct gtgatgagtc cagaggttga aagatgtatt 3420
 tagaaactat agtctgacat tgccacaaca tccagctacc tgcctcatct gttaatgatt 3480

aactttaatt gtattctaca aaagttttgg tctatgtgat atgttgcaaa ataaaaaaat 3540
 tttaaaaaagt gaggccaggc tcggtggctc acacctgtaa tcccagcaact ttggggaggct 3600
 gaggcgggcg gatcacctga ggtcaggagt tcaagaccag gctgggtcaac aatgatgaaa 3660
 ccccgctctc accaaaaata caaaaattag gggcgctgat ggtacacacc tgtgtcccag 3720
 ctactcagga ggctgaagcc gaagaatcac ttaaacctcag gaggcagagg tgcagtaagc 3780
 ttagatcaca cccactgcact ccagcctggg cgacaagagc aagactctat ctcaaaaaaa 3840
 caaaaacaaa caaataaaaa aactggctcc attgatctct tgaaaaattc tagcagctgg 3900
 gcacgggtggc tcatgcctgt aatcccatc ctttggggagg cagaggtgag cagatcacct 3960
 gaggtcagaa gttccagaga ccagtggtgc caacatgtta aaaacccctt ctttactaaa 4020
 actacgaaaa ttaccggggc gtggtgggtg gcgcctgtaa tcccagctac ctggggaggct 4080
 gagggcaggg aatcacttga acctggggagg ggaggttgca gtgagcgcga atcatgcaac 4140
 tgcactccag cctgggtgac agagcaagac tctgtctcaa aaaaagaaaa aaaaagaaaa 4200
 gaaaagtagt gtagtgcttt aaactaatct ctattttgca actatttgaa cattttcaca 4260
 ttaaacagct taaaaacaaa cctaattggat atcttcaaaa gaaacactct tttagtcaaa 4320
 acacaaagtg aaaaatttca caatgattat atggcaaatg ggtggtagaa aggttttcac 4380
 actttcccat aacttaccgg tgtaattttg aaattgcttt tatggctcaga gaaaaaaaaa 4440
 agtgttgtaa actttttttt tttttttttt agatagtatc tctctccatc gcccaggctg 4500
 cagtgcaagt gcattgatcac agctcactgc agtctcaacc tcttgggctc aagccatcca 4560
 ccacactcag cctcctgagt agctgggact acacgtgcac gccatcatc ctggctaatt 4620
 tttgtatttt tttgtagaga tgaggtttca ccgtgtttcc caggctgggt ttgaactcct 4680
 ggggtcagaa gatccaccgc cctcagcctc ccaagtgtct aggtattatg attgtaacca 4740
 cccagcctgg ctcgggaaac agatttttta aaggggagaca tagtatctat cccttagagt 4800
 tctgtaagag tagaataatg aaaaatggg acctgtggca attttagacc atgagctgtt 4860
 aagtagtgcc cgtttgcgct agatagaaaa atgtaaccaa cagcacaaagt gcagtaaatc 4920
 aactgaccag ttagttacct gagtggtgag gaattaaggc tctctattgt aattgtagca 4980
 ggtgctgctg actttttcag gggattggat atgtactgtg ccacagaatt ttttatcatt 5040
 atttgcctag ttgaacagcc agagctcttc atatgcttag agaccaccga gaaagacagt 5100
 aagtccccag caacttaaaa accattgcat gtgaatgtcc actgggtaag ctctctgagt 5160
 ttcataatct cagcaagtga aaatatcatg tagctggaat gcttttgcca cctttataaa 5220
 cgatcatgat agtaaacattt attggctcaga cgagatgcca agtgctttat atacattacc 5280
 tctcttaatt ttctcagcca ttctttcgaa ctagggtata tctctagttt acttctcgga 5340
 aagtaaaaac ttcttctgata ggaagagcca aataatctag gtcaataact ttagtgcagg 5400
 tttgtttgtg tgttttttag acggagtctc gcctgtatgc ccaggtggga atgcagtggc 5460
 gctatctcgg ctactgcaa cctctatctc ccagggtcaa gcgattctcc tgtctcagcc 5520
 tcccaagtag ctgggaactat aggcacctgc caccatgctt tgctaaattt tatattttta 5580
 gtagggacgg ggtttcaccac cgttggctag gctgggtctg aactcctgac ctcaagtgat 5640
 cccccaccga ccccccccg ccaacccccg ccagcctcag ctcctgaaag tttggggatt 5700
 acaggcatga gctaccatgc ctggcctagt atttcttgaa gagaacaatt tccctggtat 5760
 ggtctaggaa tcagaaaaatg cctttttatt tctcatctgc aagtgtagg aggtgggagc 5820
 aatgatgttc acctaattga ctttcatcat aatgtccccc cccccaatag aaagattccta 5880
 aagggtcagt ccttaattga caagattaaa tggattaatg taattattatt ttattttatt 5940
 atctgtgtgt gataagtggt aatcaaaacta tgcgtttaa acccaggata tctcctattt 6000
 cttttgtgtt gtttgtttga tatggagttt tgctcttgtt gccacagctg agtgagtggt 6060
 catggtcttg actcactgca acctccacct cccgggttca agtgattctc ctgcctcagc 6120

ctcccaagta actgtgatta cagtatgcac caccgcacct ggctaatttt tgtattttta 6180
 gtagagacag ggtttccacca cgttggtcag gctgggtctcg aactcctgac cttaagtgtat 6240
 ctgcctgccc caacctccca aagtgtctggg attacaggca tgagccaccc caccagcccc 6300
 ctctatttcc taaatatgca taaagtctga aatgcctgga tctgggatag gtatagcaaa 6360
 ggtgttggga tgggtcagga aggcagagtt gttcattcac ctcttcactg gttgtttaa 6420
 ggtcctagt tttggcctt agtgataaaa aatgattaag acaatgaatg tagagaatag 6480
 tctacttaga gacctgttca gaatgtctgt attaccatgt gtactataat agatacacat 6540
 acactatgt ccatgatttt tcaaaagtgc tagaataaaa atatttttaa atgttatagg 6600
 acactactgt ccaggaagag ttgaagaaa tccaatagag gaagaacaaa ctgagctggg 6660
 ttttgaagca tggagtttca gattaaagaa aagaagaaaa ggccaggtgt ggtggtctac 6720
 gcttgtaact ccagcacttt gggaggccga ggccaggtgga tcactaggtc aggatctaga 6780
 gaccagcctg gccaaagtgg tgaaacgctg tctctactaa aaatacaaaa attagctggg 6840
 cacagtgccc ggtgcctgta atcccagcta ctacaggagg tgaggcagga gaatcgcttg 6900
 aaccaggaaa gtggaggtaa cagtgcacct agatcgtgcc actacactct agcctgggtg 6960
 acagaacaa agctgtctca aaaaaaaaga ggccgggctc agtggctcac acctgtaac 7020
 ccagcactgt gggaggccaa ggccaggcaga tcaggaggtc aggatgataa gaccatcctg 7080
 gctaataatg gtgaaacctc gtctctccta aaagcacaaa aaaaatagcca ggcgtggtag 7140
 caggtgctgt taatccagc tactcgggag gctgaggcag gagaattgct tgaacctggg 7200
 aggtggaggt tgcagtaagc cgagatcacg ccactgcgac actgcactcc agcctggggg 7260
 acagagttag actctgtctc aaaaagaaaa aagaaaaagc aatatgcaaa attatgtagg 7320
 tccaaaataa aataggtatg agtttatggg attttagca tgggtggtag ttggtctggg 7380
 ataagatctt gaaggatttt cagcttactc aagtctgaac tctaccctcc atccaggaa 7440
 tcggcaaaat ttttctgtaa agaaactagac agtatgcact cagatgggta cagaagtgtg 7500
 attaaatggc tgatttctga attaggtatg gcgcttgaga ctctgcctag ggagagtgtc 7560
 caggctcatg ttatatgtga aaatgtgtcg ttatttttct ctcttgcctc cacacatgtc 7620
 ccttggttcc ctaagtgagg ttttgaaaat gaattttga cagttaggcc aaaaatgcc 7680
 ctataagcac gtgtatttcc ttctttaaag aattccctct caggaaatcc ctctctaattg 7740
 tattgtaaag tttggggttc gaccattaac gcattagtcc agttcaataa gcttcatttt 7800
 tttttgttgg tagcagggct catltttatgg gcgaacatac cagtaagttc ctccctctg 7860
 gggagttta agttatttaa aagcagttac agatatatta cagatgtatt atacaggagg 7920
 ttctcaagag gcaagaaggt tcagcaagtt cattgtctta attacaataa ttttttttt 7980
 ttttttttga gacagagctc ctctctgtca cccaagctgg agtgagctgg tgcaatctcg 8040
 gctcactgca gccctccact ccagggttca agtaaatctc ctggctcagc ctcccaagta 8100
 gcttgaatta caggcaccca ccaccatgcc tggctaattt ttatattttt agtaaagatg 8160
 ggggtttcac atcttgccca ggctggctct gaactcctga cctcatgac caccacactt 8220
 ggccctccca agtgcgtgaga ttacaggcgt gagccactgc ggccagccta caacaatttt 8280
 ttttttttgg agacagagtc tgcgtcttgg cgcccaagtc ggagtcaggt ggctgagatc 8340
 cagctcattg caacctccac tgcgggggtc aaatgattct tgtgcttcag cctcccaagt 8400
 agctggaaat gcaggtgtgc accactatgc ctggctaat gtgtattttt tagtagagac 8460
 ggggtttcac catgttggcc aggtgtgttt caaactccca aactcaggtt atccgccac 8520
 ctacgctcc ctaagtctcg ggattacagg cgtgagccac cagcccatc caattagaat 8580
 aactttttac atgttgtatt tttaaaattc ataactcata atctaaaatt tatgctcagc 8640
 acagctaact ttggagacct accaagaatg gtgcaatgat tcagcagcta ctcatggtaa 8700
 gacaagagta tctgggtgta acctgtatga aacctgcac tcacaaccac tgctcctctc 8760

cccagcctt ccagcccttg tgtttccat cgggggcat gtggcctgga acacagaggc 8820
 tgggctgccc aaggacaggc cccctggcct acaaaaagga cagctcttacc acagatgtgc 8880
 aatccttggc acttcctgt ggcgtctgca gttctgagac tgattttctt ctataaatgt 8940
 gaaaagatag gggatgatat gaaaccogga tataaggcag aacaatgttg cttggggccat 9000
 ctcttacacc tcagtgaaac ggaataatgaa ggaatggaa ggctggcatg ggaaccccca 9060
 ctctatcagt gatgcccttt tgctgttcca cgcgtcgttt ggggtggaag cccctccttg 9120
 tcccctcgcc acccaccocg gagcccttg tgcttcctt tctgaaactg atgtctagac 9180
 tggggaacta gaggtgcccg gaaagggaa tcgggaagaa gagactattc ctgttggttc 9240
 ctccccagag atgggagatg gtgaacaggc gtgtggaggg cggaaataatg gtccccaaag 9300
 atgtccaccg cctcatcttc agagtccgtg aacctgggaa tgtgctgcct gacgtacaaa 9360
 agggactcgc cagatgtgag taagttaaga gccctgatgt ggggagattg tctgcattg 9420
 ttggggcaag tggccttata ccaccacagg gtccccaaaa gatggagcag aggcagaagg 9480
 ttcatgtacca gggagacaag aaggatcgcg ccaaccttgc tggaggaagg tgccctgagc 9540
 caaagaatgg gagtggcctc tagaagctgg gaaaggcaag gaaatggatt ctccctggag 9600
 gctcgagaag gacccacgac ctgctgataa ctgacttta gtcatgaga ctgactttaa 9660
 acttctgacc agcagaacta taagaaaata aatttagatg tgatttttta aaatttattt 9720
 atttttagag atggggggat ctgcctatgt tggccaggct agagtgaat gattattcac 9780
 aggcattgat atagcacatg cactacagcc tcgaactcct gggctccagt gatctcccg 9840
 cctcagcccc ttgagcagct gggactacag gtgcgcacca ccacgcccag ctaaatctgg 9900
 gttgtgtgga gtcactaggt tagtgataat gtgttacagt gataagaaga acctaatata 9960
 ggaataaaa ggagtgttca gattctttta atgcccaccc ctaagcagac actcaccctg 10020
 ttcttggaag gagccgggtc cagctgcgtt ttctcatggc ccaataacaa gaagcagaca 10080
 aactaggaag aaagagaatt tattgtctga acaggaaggt cggagataat ccgaccagac 10140
 caactcaag tgtttgattt tctttgtgct tacataggtt tgggttatgt gcctatgtgt 10200
 ggtattgcac taagtctatg agtaactaat tttgtttcaa ctagaaagtc agaggccaaa 10260
 aatgtgcttt ctaagtcata tcaagctgtg aggtccccga taccgtcaag gctgtctcc 10320
 taaattctat ttaatgagga ctgtggtacc agagcattta tttatttatt tatttttaga 10380
 acggagtgcc gctctgtcgc ccaggctgga gcgcagtggt gcaatcttgg cttgtgtcaa 10440
 cctccgcttc cggggttcaa gcgattctcc tgctcagcc tccagagtcg ctgggactac 10500
 aggtgtgtgc caccatgctt ggctaatatt tctattttta gttagagacag ggtttcacca 10560
 tgttgccag gctgcctcgc aactcctgac ctacagtgat ccaccacctc agcgtcccaa 10620
 agtgcctgga ttacaggcat gagccactgt gcccgccag gagtttatt ctatcttgtc 10680
 tcatttacag ttgtgtccgg agagctgcct tagactctcc aataaactca ttcaaacagc 10740
 tgctctgttt atcttgactt gctccaggtt tggagaagac ctgtgttaga tctgtgtttc 10800
 atttctgctt ttgatgtctg ggcgtcagtt tccctggggt taattatgag cttaatgtga 10860
 aggcagcatt gtggaatttt ctctgcatag ttccgatgct attcagatct gctgtgtgta 10920
 ctgtcatgca ggccctctgt tgtgactgtg agggagcatt gctgcgccac cacccccctc 10980
 tggaaagcac cagtcacca cttggctttg gcattgttag gtcatagcag ccacagacca 11040
 cctgggtggg ctgcctcttg ccaagcagct ttacctgtct gctctgggag tcaccagag 11100
 tgaggcctgc tgtgtgtcag gagaagtgtt gttagctggg tgggtgaagg tcaccagag 11160
 ctcatagggt tggaggggag gggcatccta taactaaaca aatggccgca gacttggcaa 11220
 ttcatctttc agaagaagag ccagtgttca ggcgtgcagc tgatctcttt gaggttgagc 11280
 gcattttacc aaaaatgtgt gcttgaattt cctgctttga attttggaa agcatgtttt 11340
 tcaaaccttt ctccacctt ctgggcattt cttattaatc tttttggtca aagcccttat 11400

11400
 11340
 11280
 11220
 11160
 11100
 10980
 10920
 10860
 10800
 10740
 10680
 10620
 10560
 10500
 10440
 10380
 10320
 10260
 10200
 10140
 10080
 10020
 9960
 9900
 9840
 9780
 9720
 9660
 9600
 9540
 9480
 9420
 9360
 9300
 9240
 9180
 9120
 9060
 9000
 8940
 8880
 8820

cttgcattatg	ttttctttct	aagacaaaagg	gtccctgtg	aagtacctgc	ttgggaaaagg	11460
gaggagttgt	ggcagtttct	tctaggtcgc	cgaaggctcc	ctgtgaagta	cctgcttggg	11520
gaaggaggag	gtgtgtggtt	ttttctccag	gtcaccccaa	agagagggat	ttctgatatt	11580
gtgtgtgttc	tcggggagta	tattctttct	ctgtttatg	ccccctaac	ttttttttt	11640
ttttttttt	tttgagagca	gagtcctct	ctgtcgccca	gactggagtg	caatggtgtg	11700
atctcagctc	cctgcaacct	ctgcctctgt	ggttcaacgt	attctctctc	ctcagccctc	11760
tgagtagctg	ggattacagg	cgctcaccac	cgcaacctgg	taacttttat	atttttagta	11820
gagacagagt	tttgcgctgt	tgcccacact	ggttctcaac	tctcagacct	gagtgatctg	11880
ccttccttgg	cctcccacag	tgctgggatt	atagggtgtg	gccactgagc	tcggggccgtg	11940
ttgtctctca	acttttaagt	gtgtgaaagc	cagctggaaa	ctgtgtttaa	aatgcagatt	12000
tcctgggggc	ctcaggacct	gcactttaac	gaccacctct	gtgattgtga	tcgtgggggt	12060
ccttgagaga	cgacaacctc	gagtggtgcc	agaagtcggc	gttccttgcc	ctcccctgca	12120
gcttgggcct	tcgctacctg	atttaggatg	tttgtgtgtt	tttgcgtgtt	tagtgtgtgc	12180
acgtgtgcac	gtatttgcgg	acattttacca	gacacttctt	tggtactaaa	ttcgaagctt	12240
aacgctgtgt	acatgatcac	cacgttaact	ttgcgcacac	cctgtgggtt	gtatcattat	12300
tgaccoccta	ttcctgaaaa	agaaaactca	agctcagaca	gggtgaagtga	cctgccccga	12360
gcctaattga	gttactaatg	gtagaactgg	gaccocagtc	cgcccgagct	ccagggctcca	12420
ggacctgttc	gtaaacaact	ggacctgcag	ctgttgaaagg	tgcccagagc	gcctcttttc	12480
tttttgtgtc	gctgtacca	gtaggccaat	cttttagacc	aaaagtcggg	gggtgggggc	12540
catgcccagg	gggacctggt	aatgccattt	ctgcactttg	acaaaaactg	agttgtatga	12600
atgacttaga	taatggacat	tgaaaacattt	ttgtaattat	ttccctctct	ctctctccct	12660
ctccctctct	ttttttctct	gtccccctca	agacctcttt	ttccagctgc	cgcctctcca	12720
gcacccgaa	attcgcctgt	acaacgcaga	gcaggtcctg	agttggggag	cagtggccct	12780
gagcaatagg	acgaggcctg	ttgtctacca	atgcgacttt	aaatagtaag	ccggtatttc	12840
ttgttgatcc	ttgtctggag	ctgtgggggc	atcgtgcgga	acctctgggc	cacatactag	12900
tccctgcctc	tgctgagggt	ttgttatcaa	accctgggga	aacacatcgt	ttctggagct	12960
tgtaaaatct	ctgaggacag	aggtttcaca	gcctcccact	catctgaagg	cttaaaacta	13020
actggcagtc	aggactcgag	tgagttatca	caaggtttct	ttctttgggt	gaaagttcat	13080
gtttctcgct	gtttcaggag	taagctgtga	aaaataggct	tcacctatgt	aagaacaggga	13140
ggcagctttt	agtccttcat	ttcgggctta	aaaaatcggt	tgatttaacc	ttatagacca	13200
aatatggcct	gatcagaatt	ttgtttgggt	aattacaagt	aattctgagt	ttctcaactg	13260
gttttccatt	ttctatatta	tcctggctct	ttcatctctc	ttctgcctct	tcaagctttt	13320
cgagaatttg	ccatcacctg	atttgcaata	taaatatcata	tagaagaagg	gcgaagtcca	13380
catcctttgt	tattttttgt	ttacgttgtt	aagtaggtta	attgaagagt	aaggtgaagt	13440
tattggctaa	gtcattttgt	actatttgtt	aaacccaaat	taaaagacat	atgatgtcca	13500
gtgttgtgtg	gatgggactg	gttcatatgt	gttcacctga	tgctgtttgt	aggaatcaatt	13560
agcatagccc	tttcaaagag	gaattctaac	agcaacttga	agtcattggaa	atgtccatag	13620
tagttttcca	atgtgtgtgt	gtgtgtgcac	gtgtgcattg	gtgtctgttt	gttgtgtgtt	13680
ttttgaaaca	gagttttccc	ctatcgccga	ggctggaggg	caatggcatg	atctcagctc	13740
actgcacatt	ccacccctgt	gggtcaacgt	attcttcact	ctctcagta	ctgtgggaact	13800
caggcatgag	ctaccatggc	tggtctaata	gtatattttt	agtagagatg	gggtttttgc	13860
atgttgccca	ggctgtgtct	aaattctcgt	cccccatctc	aagtgattct	cccgcctggg	13920
ctcccacaa	tgctgggatt	gcaggcatga	gccacctgtc	ccagccttca	tagtagtttt	13980
atctcacaca	gataattcaa	cccccatcca	aaaaaaaag	agacaaaaac	tataatcatg	14040

aagagataca tgggaagtga tattcatatc catcagtagg aaagtgacca attttagcct 14100
gctaacttac gcttgaacac taaaccacag acagccaata gaaaggataa tttagatgtca 14160
tctggtagaa attgcaactc gttaaaacttt ggcatgtatt tgtattttttt atttcttatt 14220
tttgtaactt aaaaaaattt tttattcact tttatactga aaagttgcaa gtggtatgta 14280
tttattgtca agaatagaaa ggggcccgatc atgggtggctc acacctgtaa aagaatagaa 14340
aagtaggcca ggcattgttg ctcacgcctg taatcccagc actttggggag gccaaagacgg 14400
cgcgatcacg cgggtgaggag atcgagacca tctgtgctaa cacgctgaaa cctgtctctt 14460
actaaaaata caaaaaatta gctgggtgtga gtggcgggag cctgtagctc cagctacttg 14520
ggaggctgag gcaggagaat ggcgtgaacc cgggaggcag agcttgacgt gaaccgagat 14580
cgtgccactg cactccaggc tgggcccagag agcgagactc catctcaaaa aaaaaaaaaa 14640
aagaatagaa aagtaatgtg gaaaaatgac aggcaattga tttgttagag gaggtagttt 14700
ccaggtaact tgtttttctt tttctttttt tttttttttt ttttttttag acaaaagtctc 14760
cgtcaccacg gctgaatgac agtggcacga tcttggtctc ctggacctcc gctctccagg 14820
ttcaagcaat tctttatctc cagccttctg tgtagctggg attacaagtg tgcaccacc 14880
caccgggttc agataaacttc tttttttttt tctgagacca aggtctcact ctgcctcccca 14940
ggctggagtg cagtggtcatg atcatggctc aatgcagcca caatttctctg gctcaagaga 15000
tctctactct tcagcctccc aagtagctgg gactatgggc gcacactgct gtaccacgct 15060
aatttttaat tttttgaaga gatgggggtt tgccatgttg ccaggtctgg cctcgaaactc 15120
ctgggctcaa gtgattccacc cactcaacc tcccaaagtg ctgggattac agacatgagc 15180
catcacactg gcgtttctta tttgttttta aatgtccgtt gtaacagtat ttgcttaata 15240
gaaacaggtg ctaaaactgag gtttgagagt tatctctaaa tcacattgat cctgttctcc 15300
agtagttata aattacgaac attaaagtac ctgtaattaa tggagacaac caccgagaca 15360
ggctacacaa tttgcaagac ccagtgcata atgaaaatgt gagacccttt atttaaaaag 15420
tattaagaat ttcaagatgg caaccgcaga gcatcaaatg aagtgccttt ctgagaacgg 15480
gcttgatgtg agcgcacagg tcacatgtca ggaagtggc cctaccctca gcattcacga 15540
aacattacac cctagagcta aacaagaagc ttgttgtgag agtcacggct gatgtattga 15600
cttaggcttg atgtgtattt atgggctcct tggccttgaa caagggaagta cgtttactga 15660
ttttcagagg agatgctctt aaaaatggga taaaacgtta ttgcattaaa aaaaaaaaaa 15720
tttgatagag ttctatttga taaactaacc tgtttcactt tgtctctctt tcaaaaagca 15780
ttttatagat attttctcag ggataaagggt tgggtttatt tttttattat ttatttattt 15840
attttgagac agagtctcgc tctgtcatcc aggcgtggagt gcagtggtgt gatctcagct 15900
gactgcaact tctggctcat tgcaacctgc ggctcaetgc agcctccgcc tctgtgggttc 15960
aagcgattct cctgcctcag actcctgagt agctgggatt acaggcaccc accactacgc 16020
ccggctgatt tttatttttt tagtagagac agcttttcac catgttggcc aggcctgtgt 16080
cgaactcctg acctcaggtg atcccgccac ctacgctccc aaagtgtcgg aattataggt 16140
gtaagccatc acgcccagcc tagagggttg ttttagtaaa agaaacatag gttagggtac 16200
atgtgaaat tctgtgtaga aaaaagggtgaa atcggggatg attctctttt ctttttcagt 16260
ttgtagattt gataatgtaa gagggccttt gcatttgttt ttagatactt tgttttagat 16320
acaaacatgt gtttgggact ttttattagt tttgaggctt gtgagactta aatttccacc 16380
agagtatcaa gaccaaaatt acatggagca ctgtatggga agatttcaag tctaaatcat 16440
gggtagcaga cagtggctgc aggcattatt gctcccagtg ttttaatttt tttttcttca 16500
atttgttgc aacattaaga aatctggact tttcacttag aaaaaataa taataataa 16560
caggaaaaa aaccaatcct gatgtcagtt ttccttgaaa atgcagacag tggggcagca 16620

agggcccttc cagatcacgc ctctcgtgtc actgccagcc cctctctcag acctgccag 16740
cctgtcttc tcaaacattt gtttttcatt tcttctgat ttaataagca atccatgttc 16800
tttatagaaa atctggacaa tctagaaaag tagaagaaaa taaataaacc tgtgtttcta 16860
cactcaaga ataactacta ttctcatttt attttacttt ttattttatc ttattttattt 16920
atattattga gacagagtct tactctgttg cccaggctgg actgcagtgg cgtgatctca 16980
gtcactgaa acctccgcc cctgggttca agtgattgtc ctgcctcagc cttccaagta 17040
gtcgggatta caggccgcc cccacatgco ttgtctaatt tttgtatttt ttatgtagaga 17100
tgcagtttca ccatgtttag taggctgggt tcgaactcct cacctgaagt gatctgcccg 17160
cctcagcctc ccaaagtgtc gggattacag gtgtgagcca ctgcaccagc ccattattct 17220
cattttagac ttttttttct aaattcgttc tcttgtttga aaattgtgtg tgtgtgtgtg 17280
tgtgtgtaaa ccaaaccaga ctggggtcac actctggggg tctatttctt tttttatttt 17340
aaactgtagt agttaaatgt gagcattttt tcatgtaatt atttctgtgt ggacattgta 17400
tgtttcatta tgtgacatat cacatgtgtt gtatttaact tttcccagc atcgtggcta 17460
gacagttggc agcttgtgcc tgcctaaagt catgacctgc tacatgaact atatctgggt 17520
attttcttac actcttagaa gagaggttgc tgggtcaaaag gggatggact tacttaagt 17580
ttttgtgagt gacctacaa aggctggaca tagctcttga gtcccaggga caggctgagc 17640
cccgccagtg gcagggtttt gggggagcag gccctgcact gcatttgagg aagagccgtg 17700
catgttgctc ttggaggagg aggagcgggg cggttagagg gtctttagggt atctgtctac 17760
cttgaaaaag aaatcactca cctctccag agcacgccc tcaccccga cctgagagga 17820
gaggctcgtg gtttgcgac cctctcccca ttagggtctc tcacctgggg gctgagtagt 17880
aggtatctat ggcgggtgtc ttcattggaag ccttggccac gcattctgaa gtggctttca 17940
tcttgtccct tgcacttaa gcggaagtgc catcttggag aggtcggag cactgagtag 18000
aagcatgtgt ggtacgtgaa agccgggtgt cgtggggata cagagcggtc tccagtctcg 18060
tctcctgtct cccatggcct tgccttctcg gccatagtgt ctgtttagtg gggatactgt 18120
ccgtgcccc tactcaggtt cccagcagcc acctccttgg cctttctgaa gtctgtcacc 18180
taaggcaaa aggtcagagc tggggactag agtcccacgt gggagtgtgg cattgggact 18240
ctgggaaaag cactgtcatt cacaaggatg tgtggccatg tatttgga ggttttcata 18300
tgggtgagac aaatcctctt tgaattggga gctatgggtg gaaagaaact cccgaccagc 18360
aggaagcagg actggagttt gtaataacac agttccattc ccaaaacata ggctcagag 18420
actgagtttg aagtattaaa atcagttatg ggatggaatg ggagaaaaa tttgcaaatc 18480
atctatctga caagggaact gtatccagaa tagataacga actcttaca ttcaacaatt 18540
agaagacaaa taaccgaatt aaaaaccaca gctgggcaca agggatcaca cctgtaatcc 18600
cagcactctt ggagcagg gcaggaggat tacttgagtc taggagtcca agccagcct 18660
gggcaacaag gagagacccc caactctaca aagaaattaa aaataaaaa aacagtagca 18720
gccaaagaca gtggctcagc ctgttaattt cagcactttg ggaggccgag gtggcgagat 18780
cacatgaggg caggagtttg agaccagcct gaccaacata gtaaaacccc gtttctacta 18840
aaaaataaaa aattaaccaag gcatgatggt gcatgcctgt aatcccagca cattgggagg 18900
ccaaggcagg tggatcactt gaggtcagga gtttgagacc agcctggcca acatggtgac 18960
acccatctc tactaaaaat acaaaaatta cctgggtgtg gtggctcaca cctgtagttc 19020
cagctactcg ggaggctgag gcacaagaat cacttgaacc caggaggttg aggttgcgtg 19080
gagccaagat tgcgtactcg cactccagcc tgggtgacag agcaaaactc catctcaaaa 19140
aaaaaaaaaa aaaaagcggg ggggaactgt atggtacata taaattgtat ctcaataaac 19200
ctgcgttttg aacaaaaagt ctgggggaaac tattacacat gaaacagaga attctgtgaa 19260
tgaataacct tttttcttc cagcacccga cagtaaatgg ttccagggcg acatcatgtc 19320

catagggggtg	aattgtacac	agatcacagc	aacagagtggt	gacttcactg	cgcgcagttc	19380
ctcagcaggtc	tccccaatgg	atttcaatgt	cactctacgc	cttcgcagctg	agctggggagc	19440
ttcagcattg	gcctggggta	gacctgcctgt	gtttcaacac	cttcgggaatg	gtaagagaac	19500
tttgcatatg	aactctctctt	atacttttcca	ggttttcttc	acttcgcgta	tcgactccac	19560
acacctctgt	cctgcctgtc	accctaaatg	accagcagac	aaatgggtag	gacagtcaaa	19620
cccacactac	gaccttggag	gctgatgcta	agggagtggt	atttgcataa	ccagggggttg	19680
gccaacatac	gcctgcaggc	caaatccggc	ccaccactgt	tttttgtaa	taaaagtttta	19740
ttgggaacaca	cagttacatc	catcttttat	tgtctctatg	actgctttca	cactacaatg	19800
gtagagttagt	tgcaatagca	gctgttgagc	ctgcaaaagtc	taaatttact	gtggctcttt	19860
actgaaaaag	tttgccaacc	tcatgctaga	agggtagcta	gcatactctc	ctgatcaccc	19920
ttactttatc	tggtgcaact	ttctttgtgt	tcgagaatgt	gcaccttgaa	tggtgcctgg	19980
catgtagtag	gtattcagta	aatatttgtt	gaatgactga	gtgaacaaat	atgtccccag	20040
atattggaag	gagacagaa	aacctccaga	ttccagttcc	tacattttgt	ctcccagtaa	20100
ttcaatttgc	acgtagtcag	ccatgccaga	gtttttcttc	gtgtcttggt	tatgcacaca	20160
caggcgtaga	aacttaccatg	gatcttgatt	tagacaaact	aatgtataaa	acaatttgaa	20220
tgtgatcacc	gtctagatat	ttgatataata	atgaacaatt	ttattgttga	cttattttca	20280
gtgttataat	gggtgttttg	ttatgatttt	taaaaggagg	ggaggtcttg	ttaaagtgtt	20340
aaagttttatg	ttatgtgtat	tttaccacaa	taaaaagtgt	gggggataaa	aagagttctc	20400
gtggcgccg	gttgctcacg	ccataatacc	cagaccttgg	ggaggccgag	gcaggcgatg	20460
cacttgaggt	caggagttcg	agacagcgtc	ggccaacctg	gtgaaacccc	atctctacta	20520
aaaacacaaa	aattagctgt	atgttggtgt	gcatactctg	aatcccgagct	acttggggaag	20580
cttaggtaga	agaaactcgt	gaacggggga	ggcagaggtt	gttcgtagct	gagatgcac	20640
catgtcaact	cagcctgggtg	aacaagagtg	aaactccatc	tcaaaaaaaa	aaaaaaaaaa	20700
aaaaaaagca	aaataatcca	aagaacagga	gggaacagga	caaagctctc	agggcatagaa	20760
gaaacaaaat	tgggccataat	ttgacagttg	attcagtttg	gtaattagta	ctagagtgtt	20820
ttctaatgat	ctctccctca	cttttttttt	tttttttttt	tttgacagga	gtctctctct	20880
cttgcccagg	ctggagtgca	gtggcgcaat	cttggctcac	tgcaagctcc	acctcccagg	20940
ttcaagccat	tctctgtctc	cagcctcccg	agatgctggg	actacaggcg	cccgcccacca	21000
caccgggcta	tatctttgta	tttttagtag	agtggggttt	tcacactgtt	agccaggatg	21060
gtcttgaaat	cctgaccttg	tgatccgccc	gcctcgggct	cccaaagtgc	tgggattaca	21120
ggcgtgagcc	accgcagcca	gcctatcttc	tctctacttt	ctatgtgttt	gaaattttct	21180
gtaataaaaa	gttttttttt	gtgtgttttg	tttttgagtt	ggagctcttc	actgtcgccc	21240
agggctgcgt	gctgaggtgc	agtcctcgct	cactgcgaac	ttgtcctctc	gggttgcaagt	21300
gattctccct	cccggggttca	agtgagcttc	ccaagtagct	gggaactacg	gtgcacggca	21360
ctatgcccgt	ctaatttttt	gtattttttt	tagagacggg	atttccacct	gtgtccagg	21420
ctggcctcta	actccttgacc	tcgtgatccg	ccactctacg	ctcccacaa	tgtaggattt	21480
acaggcgtga	gagccaccgt	gcccgcccaa	taaaaaagtt	tttagagagg	atcatgctgt	21540
taatcttagc	ccattgggag	gctgaggtgg	gaggatctgt	tgagctcagc	agttcaagat	21600
gagcctgggg	aatatagcaa	gaccccaact	ctattttttt	ttttttttta	tcagttgggtt	21660
gtgctaggta	ctgtgagcaa	cagaaaacaga	gaagaacagg	caatctcgcc	agctcctgt	21720
ctgctgttga	caagccattt	gtccttggtt	gccaaaaccac	cctccatttg	agctataaag	21780
tgtcaataaa	gtgggaattca	ggagtatgca	aacaagtaat	gatggctggg	cgagctggct	21840
caccctcgca	atcccagacc	tttgggaagc	tgaggcaggc	agatcactg	tggtcagagat	21900
ttcaagacga	ctgtggccaa	catgggtgaa	ccactctctc	actaaaaata	caaaagttag	21960

0803742507

tatatatata	gcattatata	atacattgta	ttatatctat	aatacatatg	tgtatgtgtg	24660
tggttttctc	tttgtaattc	tttttcagtg	actgtcgggc	ctccagaaaa	cattgaggtg	24720
accocaggag	aagggctcct	catcatcagg	ttcttccttc	ctcttgacat	cgctgatacc	24780
tcacaggctc	tttttttgtt	ttatgttcot	tactgtgaaa	aaggaggaa	ccaacaggca	24840
agagcatctt	tcttttttgt	ttggattttc	ttttctttgc	agtttctggc	ttagcaaaa	24900
aaagaaacct	ttaacatggg	caagaaacct	gtgtctccat	gtccccgtgt	ccccatagag	24960
gctgagccct	gagcctgttt	ttctgtgtct	cttcaagacc	tgtttttcca	ctcggttttg	25020
tgagacctcc	ctgcgccagg	ctgatgtgaa	ggggcagcca	tcctttgatg	tcactctgtg	25080
tccttctgtg	gggggttgag	ctttgccgtg	gcctgtcta	cgatgctctt	gccacgctct	25140
gtagttttga	ggaggtttta	gtgggctctg	ttcttcctga	ggaatccaca	actacagcct	25200
gcaaggctta	actgtataaa	tgtttgaa	ttctgtgaaa	agggcacatg	cgaaatcggg	25260
ggaaacagca	gggaaaga	gttttccaga	gagcagtagc	agcaggtagt	agaaggcgtg	25320
gcatacgtgg	agaaactgcag	gtgcttagat	ttgtcagaaa	tgcacatcac	aaggggctgt	25380
ggcagctgtc	cagctgtgca	gaggtgcagt	acatcagagc	ggcctgggtca	cgctcgggga	25440
gtataggaaa	aacgtatagc	gttttgaagc	atctccagtg	ctcaaatatc	gacctcgcca	25500
tttaaggagg	ttctgtttatc	tatgggaact	tcattgatttc	ctaaatcaa	cattatgatg	25560
gtttttgata	ataagagctt	acatttatct	agagcttctc	ttgtgtttgg	ctctgggcca	25620
gaattttaga	tacttcactc	catttcactc	tttttttttt	tttttttttt	agctggaggt	25680
tcgcttttga	tccctagcta	gtttttgtat	tttttagtaga	gacagggttt	ttaccaggtt	25740
ggtcaggctg	gtctcagact	cctgacctca	gggtgatctgc	ccaccttggc	cacccaaagt	25800
gctgggatta	caggcatagc	ccaccgtgcc	ctgcgccatt	catctttata	ctaatccgtt	25860
tgacagagag	gaatccaagt	cgttaaagtg	ctgtctcaag	gtcagcagcg	aatcaactgc	25920
agcagagagc	agacagagca	tgctagcttt	cagagccctg	ctcttgacca	ccatcttttt	25980
ctgccacacg	ctttgtatct	gcaactctcc	ttcatatttt	tttttttttt	aattatgttt	26040
ctttttttga	gacagctcca	ctgtcgccca	ggctagagtt	ctgtgggtacc	atcttggctc	26100
actgcaacct	ctactctccc	ggctcaagca	gtccaccac	ttcagccacc	cgagtagctg	26160
gaactacagg	cctgtgccaa	ccacacctgg	ctaataatct	taaatttttt	ttatagagag	26220
tggggttttg	ccatgttgcc	caggctgttc	tcgaacctct	gggtctcaagc	gtatctccca	26280
cttcagctctc	caaaaagtcg	gaggttacag	tgtagcagcc	gttccagcc	tcctttctac	26340
ttcattatgg	ggaaatagaa	actgggaa	gtgagactca	ctgaaaaaca	gacttagcat	26400
ctaggaaata	gggaaaaaat	atttctccat	atcagagctc	aagatctggg	tcgattagaa	26460
tagaggggagc	gtgcgcaaat	ccagaagaga	gactctgcct	cttccaagtc	tgctctctcc	26520
aactgtgata	gggtgcggaa	atcgaaagag	tagagtgggc	ccctggagca	cgctttttct	26580
cacctctttg	ttgtctttct	cactcgaggg	caccgtgttg	ccatgctccc	tcoccaaagg	26640
cccgcccata	cttttgtttt	tttaggtgag	agtcacatca	cttctctgca	ctagctcagc	26700
ccccagaggg	cgagtttgcca	cttgtatctc	agagctgggc	agggctgcc	agcactagag	26760
aactcagctc	caggacccgt	ggggcagcct	ttgtgagcag	caagctctaa	tgaagagcac	26820
acagaacagg	cttccactgc	ctgggagccc	cttagacca	tgtcaactag	cctctctggg	26880
ctgcagcttc	ctgtgtgata	aaatgaataa	actgagctat	aagctgggag	ctgtgaagag	26940
gagcagccgt	cagggccccc	aagtcctctt	ctctccattc	acacagcat	cttactgttg	27000
cttccatgat	caaaaaggtc	aaggatgaaa	atgactctga	aagccaccaa	tgtgatcttt	27060
gttcacagtc	tgagttctgt	tgttagggtc	cccaagacc	acctatagat	gttcaaaaga	27120
ctccaggagc	tcagcacaga	gtcacactct	gatttttgtt	tgagacagaa	ttctactctg	27180
ctccagaggg	tagagttcag	tgccacaatc	tcgctcagc	ggttcaagag	attttctctg	27240

ctccagcctcc acatctgtgc ctggcccata ctctgatttt ttatagcaaa aggatgcaaa 27300
 gcaaaatcgg caaagggag aggcacatgg aggaagtcg gcagggtgccc aggggtaggc 27360
 ttccaggagc ccttctcgag ctgagtcacg caggatcac ttcatgtctc caccagcaag 27420
 ctgtgactgc acatgtgaac tggttgtctgc caggagggtc tatgagagac ccagcgccca 27480
 gggctttttc tgggggctgg ccacatacgc accctctgtg tagcgtatgc caaaattccg 27540
 actcccagaa ggaaaacaga tgttcctcat aaagaaaaca cattgtgcaa acagtgtagg 27600
 gacggtaagc caccttacca ttttgggaat gggagggata aacttgaatc caaatctccc 27660
 aggcctggcg cggtggctta cgcctgtaac ccagcactt tgggaggccg aggcaggcag 27720
 atcactttgag gtcagggggtt cgagacaggc ctggctagca tgggtaaaac ccatctctac 27780
 taataatata aaaattagcc aggcgtgggt gtgggcacct gtgatcccag ttactcagga 27840
 ggctgaggca ggagaattgc ttgaacctgg gaggcagagg ttgcagtgag tcgagatcac 27900
 actactgcac tccagcctgg gcaacggagc aagactccgt ctcaaaaaac aaacaaacaa 27960
 aaaaacgaca caaatcccca gatgtcagct aagggttgac ctggaaatca ggcctctcaa 28020
 agggcattag tgtaggcct gttactgtg ctcttctgca gtcgtgtagt ctaaatttta 28080
 ggaattccaa ttgaatgctg aaataaacc aaagggaaat ttgtgccta aaatcgtgtc 28140
 ttctcttgc ctggcagtc aacaccatta aacagaagaa aagaaaatgt aaacccatca 28200
 agtaatacta ttattcatag atcatacaat tacttttata tttttatttt ttaattttaa 28260
 tttttcagag caaatttcac tctgtcaccc aggcctggag gtcagtggtgc agtcatagct 28320
 cactgtagcc tccaattcac aggcctcaagc catcctccca ctttggcctt ccgagtagct 28380
 gggacttata ggcattgacc accatgacca gcttattttt ttattattat ttctgtaga 28440
 gacggaggga ggggtgtctca ctatgttacc caagctcaaa ctctcggagt caagtagtcc 28500
 tcccactcca gctcccaaaa gtgctggaat tacaggcatg agccaccatg cctggcctat 28560
 ttttgtattt taaaaataa caacatgttc tgtatttgaa taatctgctt tttttcagtt 28620
 aacaatttag cagcctgttc ttcccatggt tccaagata tgttatacca ccatctcatg 28680
 tggctgtagt ggattatatt gtatctcaaa attagaaaac agttctttgc aagaaacccct 28740
 atactgcat aatagggtat cgctgttttc cactttggta tgggacaatg acagccttgc 28800
 caggacaaca ggagccattg cctggaagac cagggtggga ggcagcaagg cctgctcaag 28860
 gcagcagagg gatgcgcaga ggagacacag aaccttcta gactctaggg tccagttgtc 28920
 tcttgatgac ataaatcctt aaggtcattt tagctgaaac tataggaggc tcaagcacat 28980
 tctgtcaaa ctagaacagc gttgggaatg aaaggaacat tatttcccag aataattttt 29040
 tctctgttga ctaacttgag gtatctagat taaccgtgag atacaaaatg ttggccaggc 29100
 gcggtggctc acgcctataa tcccagcact ttggggaggc gaggcagggt gatcacctga 29160
 gatcaggagc tcgagaccag cctgggcaac atgtgtgaac cctgtttcta ctaaaatac 29220
 aaaaatgagc cagacatgat ggtgggtgtc tataatccca actactcagg agttggaggc 29280
 aggagaattg ctgaaacctg ggaggcggag gttgcagtg gccagagtcg caccattgcg 29340
 gtcacgcctg gtgacagagc gaaactccat ctcaaaaaaa aaaaagaata caaatgttt 29400
 gttttgagat ggagctctgc tcttcatcca ggctggcgca atctcagcct ctcgaccct 29460
 ctgcctctgc gtccaagtga ttctctctcc tcagcctccc atgtagctgg gattacaggt 29520
 gttgtccacc acatccagct aatttttgta cttttagtag agactgggtt ttgcaatgtt 29580
 ggccaggctg gtctcttaac tctgacctc aggtgatcca cccaccctgg cctcccaag 29640
 ttgtgggatt ataggctgta gccaccocat ccagcccaaa attgttaaag agaaaaagat 29700
 tatcctagaa attgggattt actgaagtct agttactaca atgggacact tgagacacca 29760
 cagccagaaa cacagtctta aagctatcag cctctttggc cacacaacac accaattttc 29820
 acacataaaa tgtgtccact gccagccagt gaccactaa aaatggcatc ttgttctct 29880

ttggttgctg tgttcacagt gaatttgagg aaacatcaga aaagatgtag gcagcttggc 29940
catgttcatt tacatgtgtg cttgtgatgt ttttaaaaca ggtaaaaggc cctttcagaa 30000
gcaactccat ttcattggat aacttaaaac cctccagagt gtagctgtta caagtccagg 30060
cacaactgtg ttggaacaaa agtaacatct tttagtctgg gcatttaagc aacatatctt 30120
gctacgaaac aatggcagat ggtaaaaatat accttcttat gtccttctctg aactgggaaa 30180
agaatactcc tccaatagtg aaatcgggga atgcttatga ggatcatgggt ggtgggagtg 30240
gggagaccca gtgagaagag tgctgaactg caggaataat gtagctgttcg ttagatttgc 30300
agtagtgagg gctaccagac agctaccact tgettttatt cattacagga ttgacttttag 30360
ctattaatgt aagcatacca ggtgagggtg gggggtagag ggacttggcc attttactag 30420
gacaggaatg ctctttaagc agcatggatg gaacattaac tgatgtttgt gttgtgcgta 30480
ggaagatcat tctgttcact ttcgtgtcct ctttttagcc tccactgagc ttcagcaagt 30540
catcctgac tccgtgggaa cattttcgtt gctgtcgtg ctggcaggag cctgtttctt 30600
cctggtcctg aaatatagag gcctgattaa atactggtt cacactccac caagcatccc 30660
attacagata gaagaggtag gtgtgcacac atctcttttt ttttttttga gacagggtct 30720
tgctctgttg cccaggcggtg agtgcctgg tacaatctct gctcactgca gcctccatct 30780
cccagggtca agcgattctc ctgcctcagc ctctgagta gctggtatta caagtgtctc 30840
ccaccatggc ctgctaattt ttgtattttt ggtagaacaa ggggttttgc atgttgccca 30900
gactggctc aaactcctga cctcaagtga tccaccacc ctagcctccc aaagtgtctg 30960
gattacagcg gggagccact gcgcgccgccc acgcaacat cctaattggtg acacatcagg 31020
gccccactgc cctgggaac ccctaagagt gcagctgtgg gcaaaagcgt ggacacagag 31080
atttgggtta caaatggtat ggggtttgtt gtacaccat gttcatgttg acacgattca 31140
caacagccaa aaggtggaag cactccggtg tcgttgaagg attaatagat aaatctttaa 31200
tagatggtct ttcatacaa ttggaatatc ttcagcctta gaaaggaagg ggattgtgac 31260
acatcctacc acacacatgg accttgagga cattatgctg agtagagtag ggcagtcaca 31320
aaaggatact gtctgcttec acttaaatga ggtccccaga gtcatacaat ccataaagac 31380
aggaagttag atggtggtg cgtggtgga gggagggaa tgggaaagttc gtgtgaaatg 31440
gggcccagat ttcagttctg ggggtgtaca gagttctgga gatggatggt ggtcatgatt 31500
gcacaatgtg aatgtgctg gcataccga actgtacacc taaaaagagt tatgatggta 31560
cattttatgt tatgtgtatt ttaccacaat ttaatttttt ttttttaagt gcattgggtt 31620
ggctaaaaag gtggcctggc ctggagatg gctgcagtag acccctctcc gaggcagcag 31680
gtctcctctg ctgtctggag aatgtctccg ggaagtggcc tggctggagg acgtgaaggc 31740
ggtggagaca gtgactagga gcttgagctt tggggccccc aggggtgcta ggaggggcct 31800
aaggcagagt caacaccac agctgtgagt gccaggcccc gtgtaccat tgcccagtg 31860
gtattgtctaa tatttgaaag actctgagaa agaacagtag cgtgggtctt gtggaaagtc 31920
ttattttctc gcataacccc agccccctga ggctctgtga ggccatggg cctctgagg 31980
acacggctag gacatttttg ggatcagagg cgagctgaga gaagaacatt taaaaagcat 32040
ttgcagccgg gcgcagtga ccacacctg aatcccagca ctgggggagg ccagggtggg 32100
cagatcacct gaggtcagga gttcagagacc agcctggcca acatgggtgaa accctgtctc 32160
taccaaaaat aaaaaaatta gccgggctgt gtggtggggc cctgtaatcc cagctacatg 32220
agaggctgag gcaggagaa tgcttgaacc caggaggtgg aagttacagt aagccaatat 32280
cgacacatag cactttagct tgggtggcag agcaagactc catctcaaaa aataaaaaa 32340
aataaaaaagc atttgctctt ggaggcttca cattattctt gggtaaacct agagtaaaag 32400
tgttggagc agaattgtac tcagttacat gtgggatgaa cagaggttag ataaggcca 32460
agtctgcaga aacatagcag cactttcaga aagaacccta gtcacttgat ccttcactgt 32520

[illegible]

ggtcacacaa cctgtcccag cgaggagcac cgagtggccc tcatgtaca tccatgggtg 35220
 gctggcttaa aatgtaatta atctgtgtaa tatactccta gtaatttaag attttggttt 35280
 taaactggaa ataaaaagatt gtatagtga tgttttttaa agtctatgtg aagtgttttc 35340
 tttatgtgag cctattttct gcagagtgtc agctttctaa aattactcaa tctaaacttg 35400
 ttttttctta aataacacct gctagagcta ctgaggcctc atgggaacct agcaaacact 35460
 tccatggat gtcacttgat cctccaaagg ttataaagaa ggccaggggc tagtgcaagt 35520
 gccacgcctc ataattccag cactttggga ggctgaggtg ggtggatcac tgaggagcag 35580
 gagttctaga cccacctggg caacatgggtg aaacctgtgc tctatgaaaa atgcaaaaaa 35640
 tatccaggca tgaatgacatg cactgttagt cccagctact tgagaggcta aagtgggagg 35700
 atgctttagc ctgggaggcg gaggttacca tgagccgaaa tgatgccact gcaatccagc 35760
 gtgggaggca gagcgagacc ctatctcaaa aaaaaaaaaa aaaagaggcg tgggcatggt 35820
 ggctcatgcc tgaatccca gcactttggg aggtcaagat gggaggatcg cttgaggcca 35880
 ggagtttagg aacagcctgg gcaacatagt gagacctgt tttcacaaaa aataaaaaat 35940
 tagctagtcg tgggtgggtg cacccttagt cccagctact caggaggctg agaccagagg 36000
 atcatttgag cctaggagtt aggagttcaa ggctgcagtg agcaatgatt acaccactac 36060
 attccagcct tggcaacaga gcaagagacc ctgtctcaaa aataaaaaag ttataagggg 36120
 gatttgcaga aggcacatta gcacttcatt tatatgtgac aagtcacact gtgttgacca 36180
 aggcaggagt ttgtgggcaa taaagagaat taactgatta atcaatagta atgttactta 36240
 ctgagcagcg aagtcactcg atttgtgcag tactgtcggtg ctctgttgtt caaaggatat 36300
 gtatttataa tccatttata ggctgggcac ggtggctcac acctgtaact ccagcacttt 36360
 gggaggcgca ggcaggcaga tcacctgagg tcaggagtgc gagaccagcg tggccaacct 36420
 ggtgaaagcc tgtctccact aaaagcacia aatttagctg agtgtgtggg caggcaccta 36480
 taatccagc tacatgggag gcagttgggg cctgtactg ctgttaagaa agtggctttt 36540
 tttttttctt ttgagacaga gtctcactct gtccgccagg ctggagcgca gtggcgcat 36600
 ctcagctcgc tgcaacctcc acctcccagg ttcaagcaat tctcctgcct cagcctcccg 36660
 aatagctggg attacaggcg tgcaccacta tgccctggcta atttttgat ttttagtaga 36720
 gatgggggtt caccatgttg gccaggctgg tctcgaactc ctgacctcat gatccacca 36780
 ccttggtctc ccaaagggtt gagatcacag gcgtgagcca ccgtgtccgg caaaagtggc 36840
 taactctctt aagtgtgttg taacctgctg tctgcagtgg caagagctag aaagaacttc agccacagg 36900
 cccactccca ccccatgcac acaagtctcc ctgtgaagca tctgttgat gcattaggtg 36960
 caccttaagt agacaagttt ggaggaaagaa gtgttagata ggagttgtaa agacttaact 37020
 tagaccgttc aggaaatcgg agacagaaga gcttctctg ttgggcagca ggaatggg 37080
 cagcgaggag ttgaggacac atctatagca ggagaacagg aaagagtctc agccacagg 37140
 gacagaggcg aaatcaactc tgttagggta agtgcactg tgccacccca tttatttatt 37200
 tagagacaca gtctcacctc gttgccagg ctggagcgca gtggcacaat ctacttcac 37260
 tgcaacctct gccctccggg ttcaagcgat ttttgtgct cagcctccag agtagctggg 37320
 attacagatg tggccaccca caccagcta atttttgat attttttaga gatgggggtt 37380
 cactatgttg gtcaggctgg tctcaaaact ctgacctcag gtgactccgt cacctcagcc 37440
 tcccaaagtg ctgggattac aggtgtgagc cactgtgccc agccttaaat agtattttct 37500
 gaaatgaaat gccctattct ccttagtaaa ataaatgact aattgactgg attagtattt 37560
 acactgtcaa ggccaggcgc agtggctcac acctgtaatc cagacacttt gagacctga 37620
 ggtgggtgga tcatgaggtc aggagtttga gacaagcctg gtcaacatgg cgaaaacctg 37680
 tttctattaa aaatacaaaa attagctggg cgtggtggct cacacctga atcccagcta 37740
 cttgggaagc tgaggcagga gaatcacttg agcccagaa gcggagggtg cagtgaactg 37800

acatggcacc tctgcactcc agcctgggca acagagcaag actctgtctc aagaaaaata 37860
 aagtcaagct aagtacattg tcaaaatttt tgagttggaa gcactcttat aaataatccg 37920
 ttgacagggc ataataccata acctacttgc caaatcagcc cttccctgtg ttttgtaaaa 37980
 ccctgtgtcg aagaatagct tttacatctt ggaatagtta aagtcataag aagaatattt 38040
 catcacacat gaaaattcta tgatattcaa atttactgtg tcataaatat ttattagAAC 38100
 ccagaaggta agctgcgtgt agtgggtcac acctgtaate ccagcacttt gggagggtga 38160
 ggtgggcgga tctattggag ccaggagtgt gagaccagcc tgaccaaacac ggtgaaacac 38220
 cgtctctact aaaaatacaa aaattagctg ggcattggtg tgcatgctgt taatcccagc 38280
 tactcaggag gctgagcgaa ggggaattgt tgaacctggg atgcagagggt tgcagtgcgc 38340
 agagatcgtg ccactgcatt cctgggtgaca gagcgagact ctgtctcaaa aataataata 38400
 aaataggccg ggtgcggggg ctcacgcttg taatcccaga actttgggag gctgaggcag 38460
 gagggatcat gaggtcagga gtttgagacc agcctgacca acatggtgaa accccgtccc 38520
 tactaaaaat acaaagatta gctgggctgt gtgatgtgtg cctgtaattc cagctactca 38580
 ggaggcttag gcaggagaa cactgaacc tggggaggc aggttgccagtg gagccaagat 38640
 tgcaccactg cactccacct gggcgcagaga gcaagactct gctccaaaaa ataataataa 38700
 aataaaaaaa cgtctctgtc catagtgttt aaatcacata aaatggactt ctggcagggg 38760
 acggcggctc acactgttaa tcccagcatt ttggggagct caggtgagcg gatcgctga 38820
 ggtcaggagt tcaagatcag tctggccaac aaggtgacac cctgtctcta ctaaaaaac 38880
 aaaaatcagc ccagcgcagt ggcaggtgac tgtaatacaca gctattcagg aggctgaggc 38940
 aggagaatcg gttgaaccca caagggtgaa gttgcagtgga gccccagatga caccactgca 39000
 cctcaacctg ggcaacagag caagaatctg tctcaaaaaa aaaaaggact tcttggtaca 39060
 taacatttaa agaagcctgc atagtacta tggccactat gtctttgaag tggccacaaca 39120
 gagagaggct ctctgaaagg aaatgatact gatttgggaa tagggattta caaggggaac 39180
 acgtgtgcca gagtaaaacta tgcatacatt taggaagggt aaggaataca aaggttctta 39240
 aaggaaaaaa tgaggattag atcactgttt taagataatt atccttgggt ataaggatca 39300
 atagcaaggg ggaatgccatt ccaagggttag acaggcagtt gttgggcaga tgcctcata 39360
 gaagtgtttg ttgtgtaagg cgggtgaaggg ctttgtgcaa ggttgagatt tttgcagctc 39420
 tttgtgatac tttttattta tttatttatt tagagacaga gtcttgcctc gtcaccaaac 39480
 ctggaggggc gtgatgcaat cacagctcac tgcaacgtct gcctcctgga tccaagaaat 39540
 tctcctgtct cagcctcctt agtagctggg actacaggca tccgccaca tgccctggcta 39600
 attttttgta tttttagtag agatgggatt ttgccatgtt gccccagctg gtcttgaact 39660
 cctgacctca agtgatcac ctgcctcaac cttctaaaaa gctgggatta caggcatgag 39720
 ccaccaggcc cggccttctg atcatttttg ttatcaagca tttttctatg agaactctc 39780
 atggccttcc cagctcttat ttgtcagggt tttttatttg tttgcttgt ttgttgaagc 39840
 acaagtgact ccattttgat tctgacaact tccacactat gcagtcacat cctcgaggcg 39900
 cccagagccc ttcataaatat atttctgtgt tgccaaatag tctctatttg agatgagaac 39960
 atccccagct gtcttctgtg ttgatgagaa gtgagactcc accccaggag cttccggaga 40020
 tgcagtcagt cctccccacc cttcactgcc actcccagcc tcccttgaga ctcaaggact 40080
 gtccccaggg aatgaagtga aagtgcagtc tttctccttg tttccagctc gtggtgaggg 40140
 aaaaacagctg gctacgctgt agagggtatg gaaactggte agagtggtta ctgggacact 40200
 gggggctcag agccaccctg tgctaaggag aggactctgg tccgggcaac tttgcaatgc 40260
 tctaggaatg acacctagac attcctaaaa aatgatagcc taaaaattca tcccatgtta 40320
 gaaatacagg cagcactagc ttctctgggc cctcagttta tcaaaaaaag agggaggagg 40380
 cagaccctca gggttacttt acatccatat acctagctac aacataaaca tcaaatgata 40440

tgtggccagg	cgcgctggct	catgcctgta	atccagcac	tttgggaggc	agaggcaggc	40500
agatcaactg	aggctcaggag	ttcgacacca	gctctggcca	catggagaaa	ccccctctct	40560
acataaaaaa	caaaaaatag	ccaggcattg	tggtgcatcg	ctgtagtctc	agctactcac	40620
tactgttaag	catgagaatc	gctgtaacct	gggagtcagg	gggtgcagtg	agcaaatatc	40680
tgccactgca	ctccagcctg	ggctaacaga	gagagactct	gtctcaaaaa	aaaaaacaaa	40740
acaaatcaaa	acaaaaagca	caacatctga	tattaatatg	tctcttgtaa	attaaatagt	40800
ggtagtgagt	acaatgtata	ataactgtaa	attattatct	aaectcgttt	attctcacat	40860
tcagggtgta	aaaaatatct	gatctattct	ctgtgggtaa	taagagtatt	tttgtatctg	40920
aaaagcctaa	gagagggttc	aacccttaaa	gagctggtaa	gtccagggtg	gaggacctcg	40980
aggtcctctg	agatggggcg	gtacaaaaat	ttgctctggc	taaaattcaa	ttatcaaatc	41040
aaactaatgt	gtttcttgac	tatttacttt	tgaaaatttt	ctgtgaccc	ttaatacaac	41100
tgtgagtact	ttcaagtgtc	ctccagatcc	agacactctt	caagtggcca	gccccatgct	41160
aactactaaa	atagtggagc	accagtagtc	ggggctgtg	gtacattcct	gtaggctgtg	41220
caccgcacaa	ccccacagg	gctgttgacc	taaacagaac	acaaagcttc	gcagcaactc	41280
ctagtatgtc	tgatactgaa	gcgaactaag	ttccaaatgc	ctagtacacg	aagacaaa	41340
ctgaagaacc	attccaaata	ttagagacac	tgaggggata	tgacgactaa	atgcaactgc	41400
tgaccattgc	caggatctct	ccacagaaaa	atagattatt	tcttttaatt	aaagtacatt	41460
acaggggtgta	ctggaagatc	ttgaataagg	cacaagtatc	gtgatcaatg	ttaattttct	41520
gactctggca	tgtatctgca	gtgatattgt	gggggaataa	tacacagat	tcaagggtaa	41580
gtaaacaggc	gtcacatctg	cagcagtctg	ccaaacattt	aaaataacag	accaagcaaa	41640
atgttagtaa	atgttaactt	ctgggaattc	gaaaggttat	acaggaattc	tgtgtggttt	41700
tttttggttt	gttgttttgt	tttttaacag	agtttctctc	tgctgccacc	gctggtagtc	41760
aatggcgggg	tcttggtctc	ctgcaacttc	cgctcctctg	gttcaaggca	ttctctgtcc	41820
tcagctctcc	agatgggttg	gattataggc	acctgccact	acgcttgctt	aatttttgt	41880
tttttagtag	agatgggatt	tcacctagtt	ggccaacgtg	gtcttgaaat	ctcgacctcc	41940
gggtgatctc	ccaccttggc	ctccaaagc	actgagatat	aggcgtcgat	accagctctg	42000
gcctctttgt	gtctatttta	taactctcct	ggtaagtctg	atgtaatttc	aacataaaaa	42060
gttaactctc	ggctggggcg	agtggctcac	gcctgttaat	ctgacactct	gggaagtgtg	42120
tgtagcagca	ccgctctgag	ctaggagctc	cagaccaaat	tgggacaact	gggtgaattc	42180
gtgtctcaca	aaaaatacaa	ttagcgagtc	atggtggcgt	gcgtctgtag	tccaagctac	42240
tcaggagact	gaggagagag	gatctcttga	gcctaggagg	cagaggtgtc	agtgagccga	42300
gctcacacca	ctgcactcca	gcctgggtga	cagagccaga	ccctgtctca	aaaaaaaaaa	42360
aggtaatttc	ctaaactcac	aacttccatg	gtggggagg	agctactgtg	tcacactgaa	42420
taatgttttt	ggcacaggga	gtagaaactg	ttggagcaca	gacctgtact	atagctccag	42480
ctactcggga	gcttgaggct	ggagggctac	ttgagctcaa	gagttccagg	tcgaagtgtc	42540
caatgttcat	ggctgtgaaa	gccactgtac	tcagcctgtg	gtaaaatagt	gagactcctt	42600
ctctttacaa	aaaaaaaaaa	aaaaagaaga	aaaaagaaac	aaaaaagact	gctggctggg	42660
tgcaagtgtt	catacctgta	atcccagcac	tttaggaggc	tgaggtaggc	agatcctttg	42720
agccccagg	ttcgagacga	gcctgggtaa	catggtgtaa	ccccatctc	acaaaacatt	42780
acaaattagc	caggatagta	tggaactgac	ctgaactcat	tcgaaggctg	aggtggggagg	42840
atcgcttgct	cctgggaagt	gggggttgag	agagctagac	ccagttctca	aaaaaaaaaa	42900
aaaaaacagg	aaactgctgc	tggaaaaagag	cacaatttac	atcctttttg	gagagacttc	42960
tgtgttttat	tctagactct	tgggggtggg	aagaggtcaa	catgctctccc	aaatcaaa	43020
cccagactgc	tctacactgc	cataatccat	gagggtctag	gcagcctgtc	ctgcactact	43080

tactcaaaga aattttaa atcctatctg ccacagctga aagaattgaa gaggcattta 43140
ctgctatcca aaaccctaag taaaattact taagctgtga taaaagtgtc acaaaaaaat 43200
gctctggcag gctctaaact tggaagtctt gtttttctta gcatggcgtg ccacttgggtg 43260
gcaaaaagctg aaaaagtcac cagatgagaa aggaacaatc ccttcaaaag tcatcataag 43320
aaatgccggg cagggcgccct gtaattccct gcactttggg aggccaaaggc tggcgggatcg 43380
cttgagtgta gaagttcgag accagcctgg ccaacatggc aaaaccccat ctctactaaa 43440
aatacaaaaa caattagcga ggcgtgggtg catgtgccta caatcccgat tacttgggag 43500
gccaaaggcag gagaatggct tgaacccgag aggctgaggc tgcagtgcag cactgcactc 43560
cagcctggat gacagagtga gactctgtct caaaaaaaa aggaaaaaaa aagcctactt 43620
tggtgaatca cttattattt ccaggaaact tggtaagcat ttctcagat taattctcaa 43680
acatacttac agacagggaa acagtcttgc agtcaaatag ctaataaatg gcagtgcag 43740
aataagggaa taagggagaa gtaaaccaac ctaaaactaa atccataggc ctccgagaat 43800
cccagcgccc aaaccacaac tgtctagtaa caacgcaat ggaagaattc ttctactgt 43860
gccctctctg caccattttt attcccata atcaggctgg ccacaggctt ttcccaaggc 43920
cagcagtcgc cacacctaaa cattttctct tctttttgtt aattccctgt gtctctacta 43980
ttctaaagcc accatagcag cactttcccc aaattacatt tttcttttat tttttttatt 44040
ttttattttt tttttttt tgagacagtc ttgctctgtt gccacactg gagtacagt 44100
gcttgatctg agctcactgc agcctctgct tctctgggct aagcaattct cctgctcag 44160
catcccaagt agctgggatt acaggcatg accaccatac ttggcttaatt ttttgattt 44220
ttagtagaga tgggtttcac tatgttgccc aggcgtgatc cgaactcctg acctcaagta 44280
atctgcccgc ctgcgactcc caaagtagtg ggagtacagg cgagagccgc tgtgctctggc 44340
cccaaatcac atttttcaac atgttccagg agataaattt ccaagtctca gtaatgaaa 44400
acaccatata attgacaccc tctctctaaa gacatacaat acacacacac acacacacac 44460
aaaaaaaaa aaaaaaaaaa aaacctctaa gaaagaaaag aactttacag aattttaaaa 44520
aggtgttttg gagcctagtg tgggtgattg cacctctagt ccagctact caggaggctg 44580
aggcaggagg atcacttgag ctcaggaatt caagaccagc ctgggcaaca tagcaagacc 44640
ectctctaaa aaagactaag caagaaggcg gggcgagtg ctcacgctg taatcccaac 44700
actttgggag gccgaggcgg gtggatcac tggggctcagg aattttgagac cagcttggcc 44760
aatatgggtga aaccatgtct ctactaaaaa taaaaaaat agccgggtag gatgtgtacc 44820
acctgtaacc ccagctactc gggaggctga ggcacgagaa ccatttgaac ctgggagaca 44880
gaggttgtag tgagctgaga ttgcaccact acactccagc ctgggtgaca agagcaaaa 44940
tccatctgaa aaaaaaaaaa aaaatcaaga aataaagaaa gaaaaaacat gtttagacct 45000
agttcagccc agggtttccc aagcttcttt gacacacaca ccttttctca gttcacctt 45060
caggggccac agtgttctaa aagcaacttg ggaaagggtg aactaaatct aaaaaggaga 45120
gctgagtggt gtggtgcaca cctatagtag actgagggga ggactgctg agccaaggag 45180
ttcaaggcag tagtgagcta taatcacacc acggcggttc agcctgggca agagtaagac 45240
actgtaaaaa ggactccata aaaaagaa ca atgaaaaaaa agactctga gtgtaggtg 45300
tgactgaaaa ccttccactc ggggaaaaat gttagagatca tgagtccaat gcacccatgt 45360
caaacctctc gggggtctct gctcaagggg ccaaatata tgggttgata tcatcaatct 45420
ttcagttctc caatttcat atgttgatgc aaatcaatg caagtcaacg tctgtgtat 45480
agaaatacac acacacacac acacacacac acacataat atataactg 45540
gaaaaataca gcctctgggt ttttactcag tggcaacagc caagggaata caaggatctt 45600
agagcaataa aatggaatac tctgataata ttggtccaca cacaaaaaac actcagattc 45660
aatgaccact gaatcatgtg gacagcttga gaaccttagt aagggaatca catgcatttg 45720

tatagatgatta	ccaaagatctc	tgccttaact	cataatatatt	ctaagagtg	atactaacat	45780
tatctctgttt	atgtttttat	ttattttttt	ttttctagac	ggagctctgc	tttgtcacc	45840
aagctctggtt	gcagttgcac	gatctttggc	cactgcacac	tctgctctcc	gggttcaagc	45900
aattctccct	gcctcagcct	cccgatgagc	tgggattaca	gggggtgcac	accaacgctg	45960
gctaatttgt	tgtattttta	gtacagaccg	ggtttcagta	tgttggccag	gctggtctgc	46020
aaactctgct	ctcatgatct	gcccgcctcg	gcctcccaaa	gtgctgggat	tcacaggctg	46080
agccccagc	ctcgaccaca	tatatctctt	ttttaaaagt	aagaaacaga	aaattaaagt	46140
atttgctgc	acataaaaaa	caaattcagg	gttgggtgtg	gtggctcatg	ccgtgcaacc	46200
tagcactttg	tgaggttgag	gcaggttgat	gtgttgagac	cagttcacc	agaacagcat	46260
atgtgagacc	ccgtgctctac	aaaaaaacac	tttttttttt	aatgacatgg	agtcctgtgc	46320
tgttgccag	actctgagtc	agtggcacga	tttgggtcta	ctgcaagctc	tgcctccaag	46380
gttcacgcga	ttctcttgcc	tcagctctccc	aagtgtcgtg	gactacaggt	gacccccacc	46440
acgcccggt	aatttttttg	tattttttgt	acagacaggg	ttccacctg	ttagccagga	46500
tgttctcgat	ctcctgacct	cgctgactgc	ccactctagge	ctcccaaaac	attttttttt	46560
aatttaaccg	acataatgac	agctactgct	ggctccagct	gcttggaag	cggaggytaag	46620
aggattgct	gagctccagc	atttgaaggt	gcagtgagct	gtgggtgcac	cactgcactc	46680
cagcctaggc	aacagagtga	gatattgtct	ttaaaaaaa	aaaaaaaaat	tcatgtcaga	46740
ctgcagaata	gaaaaaaaac	ggcaccatt	ccagctcagc	ttcagggaac	cttccaataa	46800
ccctcacata	agcatattac	agctctattt	cttcttattt	tataaacata	actgcatctt	46860
taattgggta	tacttgaata	attgaaaaat	gaacagcaaa	tcaattttta	tggttctatt	46920
tctccaacaa	acacaataat	taaaactgtat	gagaagtaat	attttattga	acaggttttg	46980
aggtggaaac	aaataattag	ttctacaatt	tgtcataagc	atgacagagc	ttaactaacat	47040
tttgagaaaa	aaacagcaaa	gaagaaagtc	atcaaaaag	atggtatctt	gacaaaaggca	47100
cagcgtccca	caactcgtct	atactctgtc	cacaagaatt	ccctccaaga	gagagagagag	47160
gagtgatgc	aaatgggctt	acatttagagc	cgctggacact	accactggta	ttattctatac	47220
aaccaagaa	ctacacacc	ccctcgggga	aaaagctgca	caaaaaatc	gtgtaacaaa	47280
ggaaagcaaa	agtagcaata	agggcccgga	ggaatacaaa	cagtgcaaat	acagtaactgc	47340
aaactcagta	aaaggagttt	ttgatggag	tatgaacttt	caagtgtaag	atatattcca	47400
caggaatatt	cacccaaaat	ttgagaggag	gagcagaggag	agactctgag	tcggtaactg	47460
agttagatga	attcataatt	tttccactga	tgataatact	ctttgggaag	aaagtcttta	47520
tctttaatta	ttccactttt	tgtaaatggt	ttcatgcttt	taaactcgga	ttgtctcaaa	47580
cttgcttgct	attgaattgt	gtaacatcag	ataatggcaa	gttgtcaaaa	gataacccca	47640
ttggatattt	gaagctgctt	ttacgagaag	cattgggtctg	agctgctcta	ccacagtttt	47700
ttacagttac	cataaaaaac	tgagtttttt	tgatcatgta	ttatcccttc	tcacataaag	47760
tcattattga	ggaattcttt	ttaaaagaag	ctttcaaac	agtcctttgg	gcatttaaaa	47820
aatcattata	taaaagatga	ctctttcaat	acataaagac	aaatattttt	ttctttacca	47880
aaaaacctca	tttttaggcc	aaaaataagt	acaacttgc	gaaaaccttt	tatggctcag	47940
tgctcattct	agatatatga	agctatattt	ttttgtacat	cttcagaaat	cagatactga	48000
gagtggtcct	tttttttttt	gagagggagt	ttcactttct	cccccaggtc	agagtgctgt	48060
ggcgcaaat	cagctcacta	caacctctgc	cccccggttt	caagcgtctc	tcctgctctca	48120
gcctcctagg	tgttggtgat	tacaggcacc	caccacatg	cctggctaatt	ttttgtattt	48180
ttagtagatg	gggtttctcc	atgttgggca	ggctggtctc	aaacacttgc	cctcaagcaa	48240
teggcccgcc	teggccctcc	aaagtctctg	gattacagtc	atgagccacc	gtgcccagcc	48300
agagacagaa	qactqattac	ttctaaaagt	acaagatgat	tgaacctctg	cagcaggagt	48360

agatcaagtt	ctaaatccca	ggaataaaaa	actgatactc	attatccaat	tcatatagtc	48420
tgttattata	tacatatata	cagtcctatg	aatgaaaaat	aaagaiaatt	cataaaaaac	48480
tttcaaaact	cagaacataa	aaatgtaaaa	aaacaaaaca	tttaagtgtac	aactctactc	48540
atttggcaat	gtgtactgag	agataaaaaa	ccctactcac	aacagaatat	aacaaaagga	48600
aaatgtgact	taagaagtga	tctcagggtc	atagctcttc	gggtctctca	aatttctaga	48660
tcagagtgct	agaaagatga	gaaaaacaa	catgagctaa	aaacagtagg	aaacaagcaa	48720
acagaattca	ttttctcaat	atgctttgac	aggtacttca	ctgattctca	tcaattttaa	48780
aaataaiaat	agacatcatg	gcagtggttg	tcttaatttg	cttattttgt	aaagcagctc	48840
gttaactacg	atggctaagc	ataactgtat	tctttcttaa	ggcctgggaa	gttattaaca	48900
ggcaactctg	aaagaaaaag	gacatttttc	tatgactcatg	aaacaaaaaa	atgaatcaat	48960
aaatcaaaag	aaaaggggag	agagaccatt	ctcaatgtag	caggcattga	ggcactttta	49020
tgtctccagg	agcctaccat	atctaaatta	cagtaactga	agcacccctac	aacagaccat	49080
gctgcaattc	ttcattctct	caacaaataa	ttattgtgca	ctgaaaagtg	gctacgtcac	49140
aggcactctaa	gtgctggggg	gagactgagt	ccagacaaac	tgtctcccta	atggagctaa	49200
tgtctctaata	atgagacata	caataaataa	taaaattcca	ccataaaaaa	aattgctataa	49260
atgagagggtg	cacagtatcc	tcagagtga	acataaggat	cagacctagt	tagagaggtc	49320
aggaiaaggtt	ttctctgagg	atggtgactg	aattgagatc	caaaaagaag	gggggaatca	49380
tctcggcaaa	gtgagagagg	ataaggaggc	gggagcagag	agatgggaca	ctccaggggc	49440
atgagtgtgag	ctgtgggcat	actaaagtct	tgtgatttga	aatgtcagca	accaagaag	49500
ggatgtgaag	taggaatctg	gatatacgtg	ttagggcttg	aaagggacat	ctgtgactca	49560
ctggcataata	agcaataatt	ggagctctaa	gtccacatga	gttccaccag	ggacagaaaa	49620
ataacagaaga	gtttcttaag	gccaaagaca	gctttaagag	acttcaaaag	tagtagggca	49680
gggagtgagg	gatcagcttg	caaggaaaac	agaggagtga	ccagagatgt	aaataaaaag	49740
ggttgtaccc	cagagcttag	aacaggtcca	gcacacagga	agcacaatcg	ctgccttag	49800
acttgccagc	ctctgggcag	agcacataga	tgcacacagt	gtcaactatg	tccacctgat	49860
cattacaggt	tcttgtctat	ccaattgtca	tttaagtga	ttcatctacc	accacaagt	49920
gttgaatctg	aacttaattc	ctaaagactg	cctaaaaatg	cttcataaca	acttaccata	49980
tccccagaag	gctgtcagtc	acatgtcttt	gacatataag	acagcagaaa	ctgccaalca	50040
cttttcaaaa	ccaggaggtg	caaggccaca	agggcgaatt	caggtagagc	atggttggtc	50100
gagagtgtgag	ggagaccaca	tggctagagt	tgtccatgca	cgcttagacg	agccacacag	50160
agggaaacga	ggagatctgc	aggggtgctc	cttctagctc	gtggtgagt	actgaagagt	50220
ctatacataa	gaggaactca	cccaagggaa	ggaaagaaac	actggaaagc	acatgctcca	50280
gagctaccac	aaaggtcgaa	gagagttcat	actctcaaa	tgcgtagatg	gaaactctcg	50340
aaatcatgaa	gcatacagga	gtggaaacac	tcaaaaggga	tgcagtgcct	agtaggggga	50400
caaatacgtc	ctgggtctaca	gctgctctgg	tctgtcctat	aacaagctt	aagagacata	50460
aaagagctaa	ttgtttcttg	atgtctcttc	agtcactcaa	ctgcactcca	aaacaaagct	50520
taaaaacatt	taaaggacta	ccaagaatcc	agtcctcaac	aattgtatgc	aaagaccaaa	50580
ataagggaaa	atagggtcaa	aatgaagagt	aaacagaagc	agaaaaaatc	agtagaagca	50640
gtgacagaaa	tgacacagac	aattgacaaa	ggacctgtag	atagctataa	ataatactct	50700
tgtgttctaa	gtggaagagg	gcatagagat	gttaagggaa	gacatcagaa	ataattttta	50760
agacccaatc	aagctcttag	agagagaaaa	tacatactgt	gagatgaaaa	aataatgga	50820
tggcatagat	tagacattgc	agaagtagag	attaatttat	ttaatcttct	aaagtgaaca	50880
tagagagatt	aatatttatt	attattgtat	ttattttatt	tgaagtgaag	tctcgtctag	50940
ttgtccagca	tatgttgaat	ctcagctcac	tgcaacctca	gcctccggag	ttcagagtga	51000

tctctggcct cagccttcg agtagctggg attccaggca tgcaccacca tgeccagcta 51060
 atgtctgtat ttttagtaga gatgaggttt caccatgttg gccaggctgg tctcgaactc 51120
 ctgacctcaa gtgacccacc cgcttggcc tcccaagtg ttgagattac aggtgtgagc 51180
 caccatgcc agccgagatt aattttaaaa tgtaacaata gaaactatcc aaactgaac 51240
 acaaacagga aaaaaaatc tgaccattag caagctgtga gacaactctg agcagcctat 51300
 tataacctgt aattgaaatc ccagagggag ggtgcagtg atacaaaaa tgcctgaaga 51360
 aataatggct gagaagaatc tagatttatt gatgaactat aaacctata atccaagaaa 51420
 ctcaatatac accaagcaga aggaatatca agaaaactag accacagtac atcgtaatca 51480
 aattacttaa aaccagtgac aaaagcaagg tttttcaagg cttagaagtt acttaatatg 51540
 ttatggggga tggggacaga ggcagataaa attttataaa tatataccta aatatcctat 51600
 gttgacatta aaagacattc attctaggct gggcatgggt gctcacacct gtaactctac 51660
 cactttggga ggctgaggtg ggcagatcac ttgaggtcag gagttcgaga ccggcctggt 51720
 caacatggca aaaccccatc tctactaaaa atacaaaaa tagctgggtg tggcagtgca 51780
 tgctgtgat cccagctact tgggagggct aggcacggaa ttgcttgagc tggggaggca 51840
 gagggttgct tggagctaga ttgcaccatc gcacatcagc ctggggcaaca ggcagagaa 51900
 ccagctcaaa aaaaaaaaaa aaaagacatc tcattctaaa aagcatagaa tggacttcat 51960
 tttggggata ttttagaaga ctgccccaa aaaatacttt taatatgtgt ttatttttcc 52020
 acttacttta acttttctta aaagggcatt cagaaaaacag aatttcccaa cagggtttgt 52080
 atataaatgt catactatgt attaattatt attattatt tgatatggag tcttgctctg 52140
 tcacccaagc tgaatgcag tggcactatc tcgactcact ccaaccccg tgctctctgg 52200
 gtccaagtgg ttctctcgcc tcagcccttc gagtagctgg gattacaggc acacaccacc 52260
 atggccgact aatgtttgta tttttattag agatgggggt tcaccagtgt ggccagggtg 52320
 gttctgaacc cctgacctca gatgatccac ccacttcagc ccccaagtg gctgggatta 52380
 cagacatgag ccaccacacc tggctggcca ctagggtatta attctgggtt ttcttttttt 52440
 ctctcataag gtactttacc tgtgtgtgtt aatttttttt tccccgaaag gctagtcaag 52500
 tgaacaatg ggtctgatag ggttttttaa taagacacag gctatgggaag cagcagctcg 52560
 gattcaaatc caggctcttc atttactagc taggcacctc aaagcaagcc ctaaaactta 52620
 tttctctatc tataaaatgg gaataacact ggggtgtggtg gctataatcc cagcactttg 52680
 ggaggccgag gcaggcaaat tgtctgagct caggagttcg agaccactct gggcaaatag 52740
 tgaaacctc gtctctacta aaatacaaaa aattagctcg ggtgtgtgtg gtgcacctgt 52800
 agtccacctc actcgggagg ctgaggcatg ggaatcgctc gagtcccgag gcggaggctg 52860
 cagtgcagcg agattgttcc actgcactaa ggcagcttgg gctacagggg gaggactcct 52920
 cgcaaaaaat aaataaataa ataaaaataa aatgggaata acacttgaca 52980
 tatattttaa ataattaat gcattatttt attttatttt ggtctcactc tattgccag 53040
 gctggagtac agtgtgcag ccttgctca ctgcagctc aacctctcg gctcaagcaa 53100
 tctctccacc tcagctctct gagtagctgg cactgtacac caccacaacc agataatttt 53160
 tatatttttt tatagagaca gggttttgct atgttgccca ggcttactct aaactctag 53220
 acttaagcaa tccaccactc tcagctctcc aaagtgtctg gattacaggc atgagccaca 53280
 gcacttggcc taaatgtgaa ttcaaaaggt aaaaatatata aaggatccag ctaaagtctt 53340
 gatacacaga aagactctta gttaaaaggc ctctctgtct ttatgtaaca gtggaattct 53400
 cactttttaa aagaagttct atcatgttaa ccaatccatg ggatttatat ggtgtccata 53460
 tatatgtctg cttaattaag ttgacatttc tgtaaatgtt acaggcgctg ttaaaaaata 53520
 aggcacacta cctaaaaaat ataagtgcat tttgaaaaa cacagctagt cccgataaa 53580
 catcagtatc tacatacaca aagtaaaaca gattagacgg ttatataggc aaacggcag 53640

aataaagtat cagtgccatt cataatgata cattttgtat attacaacat actgctatta 53700
ttcattaact gtaagacatc tataatgaaa ctgaaagaag aaaatgcaa ttttaattccc 53760
ccaaagcaaa ggactgctct tactctggat aaaagtcaat gaacttacaa agttttcttt 53820
tagtcaaaagt aattgctggt tctagctaca tcaaaactgc tgagggaagca gtaacttgct 53880
cctttgcctc ctatggccaa cactgaaatg caaaatcgta aaaacatata aaataaattc 53940
ttgactttta aacagtctgt taattttatt tctttcatga attcaagagg ttttttgtgt 54000

<210> 12

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 12

catattaagc ttccaactct

20

<210> 13

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 13

agtcgaaatg ttgtctttaa

20

<210> 14

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 14

attcgaggat tcgccctttt

20

<210> 15
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 15
tgatcgcac aattcgagga

20

<210> 16
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 16
cgatccttcc ggaagggcc

20

<210> 17
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 17
ggcctcccag agcgaggagc

20

<210> 18
<211> 20
<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Antisense Oligonucleotide

<400> 18

tcttcgggtg ctgaggagcg

20

<210> 19

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 19

aggacctgct ctgcgttgta

20

<210> 20

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 20

ccactggctc ccaactcagg

20

<210> 21

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 21
gtagacaaca ggcctcgtgc 20

<210> 22
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 22
actgtcggtg tatttaaact 20

<210> 23
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 23
tgcggccgt gaaccattta 20

<210> 24
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 24
aattcacccc tatggacatg 20

<210> 25

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 25

tggtgctgtg atctgtgtac

20

<210> 26

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 26

acactctgtt gctgtgatct

20

<210> 27

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 27

gaagtcacac tctgttgctg

20

<210> 28

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 28

aaatccattg ggaagcctgc

20

<210> 29

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 29

gaagcgctag agtgacattg

20

<210> 30

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 30

gctcccagct cagctcgaag

20

<210> 31

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 31

gaatggagtg ctcccagctc

20

<210> 32

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 32

tgtcaccag gcagaatgga

20

<210> 33

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 33

tagtgttgaa accaaggcata

20

<210> 34

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 34

ccgacagtca cattccgata

20

<210> 35

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 35

cacctcaatg ttttctggag

20

<210> 36

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 36

aaggccgtgg aggtatcagc

20

<210> 37

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 37

cctccttttt ccagtaatg

20

<210> 38

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 38

gggcctttga cctgttgga

20

<210> 39

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 39

agttatccaa tgaatggag

20

<210> 40

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 40

gtacactctg gagggtttta

20

<210> 41

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 41

ctggacttgt aaacagtaca

20

<210> 42
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 42
cttttggtcc aaagcagttg

20

<210> 43
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 43
actctaaaga tgttactttt

20

<210> 44
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 44
cgactctaaa gatgttactt

20

<210> 45
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 45

taaatgcccg actctaaaga

20

<210> 46

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 46

ttgcttaaat gcccgactct

20

<210> 47

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 47

ttgtttcgta gcaagatatg

20

<210> 48

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 48

ctcagtggag gcatctgccca

20

<210> 49

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 49

ttgctgaagc tcagtggagg

20

<210> 50

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 50

gaaaatgttc ccacggagat

20

<210> 51

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 51

cgacagcaac gaaaatgttc

20

<210> 52

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 52

caggctcctg ccagcaccga

20

<210> 53

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 53

taatgggatg cttggtggag

20

<210> 54

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 54

taaatactct tctatctgta

20

<210> 55

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 55

tcctaagatgg gctgagttgg

20

<210> 56

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 56

cgtcacacctt tggtagactg

20

<210> 57

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 57

aatggacaca gagtccaga

20

<210> 58

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 58

cgagataatg gacacagatg

20

<210> 59
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 59
catgctttgg ttcaaagcgt

20

<210> 60
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 60
agtgggctag gcccatgctt

20

<210> 61
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 61
ctcttccagg gagccagtgg

20

<210> 62
<211> 20
<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 62

gcttgatctc ttccagggag

20

<210> 63

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 63

actctagcag ctccgatggc

20

<210> 64

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 64

ggcagcaaaa ggaatactg

20

<210> 65

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 65
ctctcatgtc tgcaggaca 20

<210> 66
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 66
tgtcaccccc atgagacctg 20

<210> 67
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 67
ttttgaaaat tctttaagaa 20

<210> 68
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 68
caagcaatta catgcctttt 20

<210> 69
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 69
agtatcagag atgtgtcata

20

<210> 70
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 70
ttctgactgc tcagccaac

20

<210> 71
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 71
tcaagacgac gaccaggtct

20

<210> 72
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 72

ccaaagtcaa gacgacgacc

20

<210> 73

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 73

gccactcagt gtccctcgct

20

<210> 74

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 74

tgtacatgaa gggccactca

20

<210> 75

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 75

catggatgta catgaagggc

20

<210> 76

<211> 20

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Antisense Oligonucleotide

<400> 76

ttttaagcca gcacaccatg

20

<210> 77

<211> 20

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Antisense Oligonucleotide

<400> 77

gattaattac attttaagcc

20

<210> 78

<211> 20

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$

<223> Antisense Oligonucleotide

<400> 78

atatttaca gattaattac

20

<210> 79

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 79

tcactgggcc ctttctaact

20

<210> 80

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 80

cctccttcac tgggcccttt

20

<210> 81

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 81

tagaaatgct ggaagtttct

20

<210> 82

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 82

gccggctcca gggcaaaccc

20

<210> 83

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 83

ttgggtgaca gagagagact

20

<210> 84

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 84

aagttattct aattggatgg

20

<210> 85

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 85

ttcttagagt gtagaacaac

20

<210> 86
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 86
gaggaacaaa ttaggaact

20

<210> 87
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 87
cctggggcag agtgcaagac

20

<210> 88
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 88
gctctgtcac ccaggctgat

20

<210> 89
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 89

tctcttgcat cagcctctca

20

0344377.01504
105210.4224860